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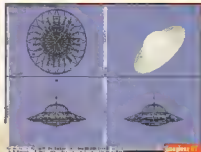
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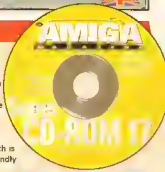
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**11 Dir Work 2.1**

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**14 Super CD-ROM 17**

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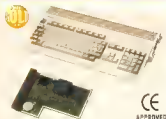
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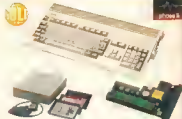


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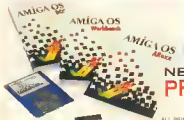
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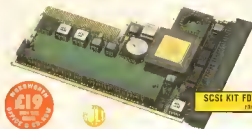
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# PC Task 3.1



programs. CD users also get the demo version of PC Task 4.3. It's restriction is that you can't write to hard drive.

## Installing PC Task

### Floppy disk users

Insert the first disk in a drive and double-click on "Install! PCTask3.1". You will be asked where you want it installed. A directory called PC-Task3.1 will be created there.

### CD users

You will need to install PC-Task manually, since the install script was written for installation from floppy disks. First copy the contents of PC-Task3.1\devs to your DEV5: directory, this is all that's needed if you want to run PC-Task from the CD, otherwise create a PC-Task directory and copy over the files in PC-Task3.1 and the MSDOS\files directory.

### All users

There are four versions of PC-Task, two for 68000 machines and two for 68020+ machines. The Turbo version uses a lot more memory, but runs faster, use it if you have the memory available. You can remove any other copies from your hard drive to save space.

Before you can use PC-Task, you need a copy of MSDOS, we couldn't supply this on the cover disks because of Microsoft's licensing.

## Installing DirWork

### Floppy users

Double-click on the "Extract DirWork2.1" icon and select a temporary directory to extract to, it needs around 700KB so you could extract it to RAM: if you have at least 1Mb free. Then open the DirWork2.1 drawer and double-click on the "Install-DirWork" icon. Once again, the installer will create a directory for you.

### CD users

Go into the DirWork2.1 directory and double-click on the "Install-DirWork" icon. Once again, the installer will create a directory for you.

Our cover disks/CD include 2 programs from Quasar Distribution, DirWork 2.1 and PC Task 3.1. Both are full versions of commercial pro-

**I**nstall PC Task as detailed in the box out start the appropriate version from its icon and you will see the configuration screen (figure 1). For now the bottom left section is most important. You need to tell PC Task where it's hard and floppy drives are found. A and B are floppy drives, use DF0: for A. C and D are hard drives. PC Task uses hardfiles to simulate the PC's hard drives.

There is a 2Mb hardfile on the second cover disk. CD users get a 10Mb hardfile. You will need to create a second hardfile on which to install MSDOS, so click on "Create HardDiskFile" and enter hardfile1 for the name and a reasonable size (in megabytes). Once the file has been created you can set up C and D as hardfile1 and hardfile0 respectively and save the configuration.

Put your MSDOS floppy in DF0 and press Start. PC Task should boot from your MSDOS floppy and look like figure 3. The first thing to do is partition and format the new hardfile. Type FDISK at the prompt and select option 1 from this menu and the next. Select Y at the third menu and follow the instructions.

Once you have rebooted the PC, you can format the new 'hard drive' with 'FORMAT C: /S'. The /S tells MSDOS to include some essential

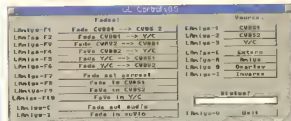
system files on the drive. Finally copy the contents of the floppy to your hard drive with "COPY A \*.\* C:". Now eject the disk in A and reboot the PC with Ctrl-Alt-Del.

You should now have a fully working MSDOS setup on disk C. You can copy files from the supplied hardfile to C using the MSDOS copy command, but there is an easier way. Provided you copied hardfile device to DEV5, you can access the PC hard disks from the Amiga.

Since using both the Amiga and PC to write to the same disk at the same time could be disastrous, quit PC-Task first and then run PCTCrossMount. This mounts C and D as TCC and TDC on the Amiga, provided you have CrossDOS installed. CrossDOS is supplied with all versions of Workbench from 2.1 onwards. For some reason you need to assign HF: to the directory containing the hardfiles after you run PCTCrossMount.

The 10Mb hardfile on the CD contains a large amount of PC shareware. You can also copy files from PC CDs in an Amiga mounted CDROM drive. You can copy files to and from the hardfiles using Workbench or the shell, but by far the easiest way is with a file manager, such as DirWork.

Have fun!



# Dir Works 2.1

**D**irWork is the second program from Quasar on this month's cover disks. It is a directory manager using the traditional two-pane format, as pioneered by programs like DirUtil and SID and developed further with Directory Opus 4. I used DirWork for years, first as a shareware product and then the commercial version. I found it superior to any other two-pane file manager (and I tried them all). Several CUCDs were compiled using DirWork and even though I use Directory Opus 5 in Workbench Replacement mode now, there are still features I miss from DirWork.

Install DirWork as described in the box-out, start it from its icon and you should see the default configuration as shown in figure 4. This is a very basic 2-pane setup, but DirWork is capable of much more. The installer will have saved several sample configurations (in the configurations directory). Load some of these from the main menu to get an idea of what can be done.

Creating or modifying configurations is done from within DirWork, select Configuration Editor from the menu to get the selection window and select "Change Buttons/FileLists/Scrollers". You should now see something like figure 5. Everything on this screen is an object that can be selected and edited: you can change the size, position, font, colour and actions of each object. DirWork has a range of internal actions to handle different processes, mods, samples etc, but let's



set up a button to use an external command: MPEGa is on all the CUCDs and is an excellent player for MPEG audio files.

Click on one of the buttons and change the Text gadget to read MPEGa, click on Change Action(s) and then Select Actions, pick "Run external program" from the list and you will see something like figure 6. Type "C:\MPEGa\%p%\\*" in the program gadget (this assumes MPEGa is in C:\ of course).

The %p% refers to the path and filename of the selected file. Click on Console Window and select one of the options: you don't need a window to open for MPEGa but it means you can see what's going on. It's a good idea to always add a window when setting up new buttons, so you can see any error messages. You can remove it when you have the button working exactly as you want.

Make sure you use a window with the CLOSE option, otherwise it will stay on the screen after the button action has ended. The two gadgets near the bottom need to read



'Current source' and 'Selected files'. Next on the menu is this window and the next, followed by Save & Quit. This should return you to DirWork with your new button.

Now if you select an mpeg audio file and click on the button you will hear the file. If you don't have mpeg, try setting a button to show a picture with ViewTek, Visage or even Multiview. It doesn't stop there, we can now configure DirWork to recognise an mpeg file and automatically play it when you double-click its name. Go back into the configuration editor and select "Change

Specific file/dn type InstantActions" and click on Add. You will get a window like figure 7. Type MPEG audio. In the Description field and "#? mp2[3]" in Enter Pattern. This means that any file ending in .mp2 or .mp3 will be recognised as mpeg audio. Select Change actions and set it up exactly as you did for the button. Click on Use the Save & Quit and double-click on an mpeg file.

This only scratches the surface of what you can do with DirWork. Have a look at the example configurations and the various options and keep experimenting.

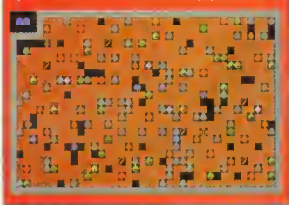
## Diamond Caves II

Somehow we've squeezed this great little game onto the cover disks along with everything else! Diamond Caves II is based on the classic Boulderdash game that was popular on the C64. Diamond Caves II takes things a bit further by offering a level editor to enable you to make devious mazes for yourself and your mates to negotiate, or even just to make incredibly easy ones for people who are crap at computer games!

The object of the game is simple. Collect all of the diamonds then leave through the exit which will start to flash. Some objects in the game (such as rocks) are affected by gravity, so if you undermine the soil beneath

them, they'll fall into the gap beneath. If you happen to be under a falling rock you'll be squashed. Other bits and pieces, including yourself, will not be affected by gravity. It seems to make sense once you start playing anyway. You'll find other features too, such as conveyor belts, quicksand, doors requiring keys and landmines.

Before you can play your first level you'll need to select a player name, and then select a set of levels. Once that's done you're ready to go diamond hunting. Optional extras also allow you to distill the game to run on any available screenmodes (including Cybergraph) and you can have one or two players.



# CD-ROM

## Super CD-ROM 17



Welcome to CUCD17. If you haven't invested in a CD drive yet, read this to see exactly what it is that you're missing.

CUCD17 can be booted from a CD32 or an A1200/4000 with CD32 emulation. In order to use this CD from your own Workbench, you only need to click on the InitCD icon, which will then allow software to run from the CD. It initiates MUI, IDer and the NewIcons systems — don't be surprised if the look of your Workbench suddenly decides to change. The whole thing is only temporary, and it can be removed by simply clicking on InitCD again.

To help you in finding your way around, there is a DOCS.GUIDE, which will connect you to nearly all text documents, and INDEX which is a CD search tool. Just like everything else on the CD, you need to click on them to activate them.

### 650 Mb of What?

It's easy to miss the where the real contents of a CUCD live so here's a list of how much data lies in each directory.

CUCD17 is a well balanced CD, packed to the brim with 650MB of data. This month's theme is the definitive Icon and Workbench collection with thousands of files 130MB of data!

● PCTask/DirWorks .....	10MB	● CDsupport .....	75MB
● CoolWB .....	130MB	● OnEscapes .....	60MB
		● CDROM .....	22MB
		● Demos .....	32MB
		● Games .....	30MB
		● Graphics .....	30MB
		● Magazine .....	55MB
		● Online .....	62MB
		● Programming .....	25MB
		● Readers .....	25MB
		● Sound .....	38MB
		● Utilities .....	25MB
		● WWW .....	40MB

Not one but two great commercial packages, a huge icon/workbench theme and the usual superb packed-to-the-brim CUCD. Lots of wholesome goodness!

### Highlights

#### PC Task 3.1

The excellent PC emulation package is provided complete with a 10Mb harddisk to check out some useful MS DOS applications

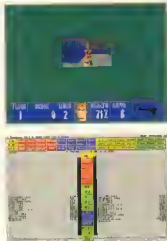
#### Dir Work 2.1

The Amiga's best split-screen style directory utility now on the CD in the complete commercial form. Use Dir Work to browse this and other CUCDs!

**OnEscapes**  
A new super-demo of the fabulous OnEscapes. This time it's over 50Mb in size and features far more of the game to check out

#### CoolWB

The definitive collection of workbench enhancements, icons, backdrops and more. Thousands upon thousands of files that make CUCD17 a disk to leave in your CD-ROM



### More on IDer

Receiving a CUCD on CUCDs has been a mixed bag of criticism and praise. Much of the problems have been caused by a lack of understanding of what IDer is for and failure to click on the essential InitCD icon.

This month we have made some changes to the IDer launcher to work around the teething problems so that this system is more fool proof.

For those that missed it, most project icons on CUCDs now have IDer as the default tool. IDer allows you to choose exactly what viewers and players you wish to use for specific types of files.

Graphics card users may display all pictures on current and future CUCDs with a hi-resolution viewer, for example. Your preferences are saved to your hard drive.

The CUCD preferences program can be found in the top left of the CDsupport drawer.

## What's in your drawers?



**Root:** The CDsupport drawer can be found in the root of CUCD17. The standard Workbench drawers icons have vanished (though the drawers remain) to be replaced with the CDsupport drawer and an opening Readme file. Draw Studio, AIR Link, the IsilonGames demo drawer and the main CUCD icon can be found here.

**Quasar:** Quasar's full commercial PC Task 3.1 PC emulator and the split-screen directory utility Dir Werk 2.1 can be found here. There's also a PC Task 4.3 demo to try out on the hardfile.

**OnEscapee:** Sadness! OnEscapee game demo revisited



but this time it's several times bigger and better than ever.

**CoolWB:** Workbench backdrop pictures, enhancements and icons icons icons! Revamp your Workbench like never before, you'll be coming back for this.

**CDsupport:** The vital support files for the CD, viewers, players, iDer and the obligatory CUCDprefs program.

**CUCD:** This is where the vast majority of the CD hides. What wonders can be found within.

**CDROM:** The latest AmigaCDFS, Amnet CD indexes, CD ID collection and also the OpiyCDPlayer are all found here.

**Demos:** AGA and ECS offerings to swirl your plasma and rotate your 3D world. Turn the lights low, crank your stereo and enjoy!

**Game:** Joystick feeder deluxe, AmigaCheats, several Tarngetchi clones, QUID Nemesis, Team 17 hard drive installers and an excellent SWOS 97/98 update.

**Graphics:** Animations, 3D Objects, pictures, the latest Picasso 96 RTG software, Ultraconv and SuperView NG.

**Magazine:** All of the C source files from the tutenet, the programs from Freeware roundup, AIRLink, Wired World and the free UKOnline Thai software!

**Online:** AmFTP Miami 2.1p, SANA 2 meter web loaders, fixers, GUI html creators, RFCs and the Usenet News and CU Amiga.

**Mailing list archives:** AMOS Mailing list archive, the source for the DICE C compiler, the MUI development and XPX compression archives.

**Readers:** Anim8, Meds, Pkx, Utils and lots lots more all sent in by other users of CU Amiga. CUCDs: Is your work here?

**Sound:** MIDI files, modules, samples, MPEG, Audie Layer 3 encoder, Wavebeast and more files and utilities to get those speakers pumping.

**Utilities:** Lots of utilities including the latest version of SysInspector, Virus checkers such as VirusZ, commodities, ASL, to MUI patchers and more.

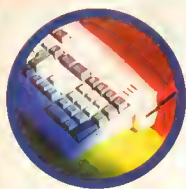
**WWW:** The big three web browsers: AWeb II, 3.0, I browse 1.12 and Voyage-NG demos. The usual on-CD Amiga web sites and CU Online!

## Disk doesn't load?

If your CD does not load contact DiskXpress on 01451 810788. If they advise that the CD is faulty send it along with a SAE to: CU Amiga Magazine, Disk Returns, DiskXpress, 7 Willow Court, Bourton Industrial Park, Bourton on the water, Gloucestershire GL54 2HQ.

Please note that some CDs will not autoboot on systems other than CD32s, so try loading it from Workbench first. CUCDs will work with almost all Amiga configurations and filesystems. However, we recommend older CD filesystems be replaced where possible. A non-working program is a not an indication of a faulty CDI.





# News

## Apple no problem for PPC

**C**oncern over the future of the PowerPC processor has been voiced following the news that Apple computers have decided to limit the licensing of MacOS and suspend the CHRP common hardware reference platform. Apple, under the management of returning Mac guru Steve Jobs, have decided to reign in the clone manufacturers: an interesting move at a time when Amiga International has declared that the future of the Amiga is in clones. Apple say that they were losing money at a rate of \$200 for every clone sold, but ex CEO Gil Amelio, whose departure was less than happy, has claimed that the move will lead to disaster. The move has resulted in a lot of speculation that Motorola, who worked in co-operation with Apple on the CHRP project and produced a

large number of clones and motherboards, would react badly. Some in the Amiga industry have suggested that this spells doom for phase 5's newly released PowerPC boards, but Motorola have told us that there will be no problem. Motorola have told us that PPC development is very much driven by the desktop market and they have every intention of supplying desktop PPC chips to everyone who needs them, be they phase 5 or Apple. The future of PISC is slightly less clear, as they had been working on CHRP based systems. Their plans for PowerPC Mac and Amiga clones continue with the announcement of the Mega series of Mac clones with MACH5 PPC processors running 350MHz 604s, but the position of the CHRP TransAM Amiga clone is more complex. PISC tell us there is no problems sourcing the HYDRA

chips, but have contingency plans if any problems arise in the future. A HYDRA less PISC machine would not be a major problem as it was originally designed without it. Motorola's plans for the future of the PPC family of chips makes interesting study. The massive success of the PPC in the imbedded systems market has led to improvements in manufacturing techniques which could have interesting implications for future Amiga PPC developments. The lower end 603e chip, currently running at up to 360MHz, is being redesigned to use 0.25 micron technology rather than the older 0.35 micron it currently uses, which should lead to cooler, lower power consumption, and faster chips. This would make it a tempting CPU as a base model for future Amigas. Looking to the future, project 2000 due for completion at the end of the

decade, uses sub 0.1 micron technology and runs at 1GHz.



## UK Online give Amiga support – and free trial

CU Amiga has teamed up with UK Online to offer another internet deal, this is also based on the superb NetConnect software like the last offer. However, UK Online are now

offering a month free trial. The Cover CD has all the software needed, there is no forms to fill in, if you have a modem you can get online right away!

UK Online plan to support Amiga users as no ISP has done before. Included in their plans are an ample mirroring of the most important Amiga web sites such as the Amiga Web Directory and Amiga.org etc. We will bring you full details of

these developments as they come. As added incentive to get online, UK Online have organised an impressive competition. All you need is a UK Online E-mail address which means you can be an existing user or a fresh participant in the Free Trial see page 31 for details. The impressive list of goodies in the prize hamper include: Active Software's K56Flex Dynalink modem worth £129.95, a full NetConnect 2 CD worth £54.95, High speed serial card worth £79.95 and STFax Pro (fax/voice software) worth £29.95, a UK Online Family

Internet account for a year, Sadness Software's Hidden Truth and AGA Experience 3 CDs, and of course a subscription to CU Amiga Magazine. As if this hamper wasn't enough, by the time you read this it's expected that there will be an even bigger array of prizes on offer. Drop by <http://www.ukonline.co.uk/Corporate/Comp/amiga.html> for full details on the competition. So what are you waiting for? Get a modem, get on line with the UK Online free trial and enter the competition! More information can be found on page 31.



# Cloanto to make Amiga Emulator

**Special** Powered by Amiga's Amiga emulator for PC compatibles will be released by Cloanto, the Italian creators of Personal Paint. Cloanto's new emulator, entitled Amiga Forever, is based on UAE the Amiga emulator which has been around for a while now. Cloanto have acquired licenses to use AmigaOS 1.0 through to 3.0.

The Amiga Forever package will include Amiga Explorer (an Amiga file networking solution). The user interface is an object-oriented extension to the Windows desktop, upon which the Amiga appears as a networked computer.

Connection will be made via serial or parallel ports. A future upgrade is planned to use TCP/IP networking.

Unlike the previous situation with UAE, Amiga Forever will be easy to use with an Amiga operating system pre-installed.

The Amiga Forever package will come with a floppy disk with the Amiga networking soft-

ware on it, a CD with the PC software and a collection of Amiga software including Personal Paint. The Picasso 96 emulator makes the software package a lot faster with P96 compatible software.

Cloanto have answered worries that this will damage the Amiga by pointing out that a lot of ex-Amiga owners will be attracted back, and that emulating the complex chipset of an Amiga is never going to be a cheap replacement for the real thing.



▲ Keeping the Amiga alive – on a PC. Is Cloanto's Amiga Forever the way forward?

## RC5 cracked

The largest exercise in distributed computing has come to an end with the news that the 65 bit RC5 encryption algorithm from RSA labs has been hacked.

This privacy cypher took the combined computing power of the equivalent of over 20,000 top end personal computers 160 days to crack over 4000 teams contributed to the effort, and readers will be glad to know that the Amiga team effort was spectacularly successful.

RC5 Amiga, administered by Thomas Tavoily ran for only 63 days but managed to achieve an amazing 7th place in the overall rankings, one place above the BT effort which started the previous day, and 30 places above the Microsoft effort. The table for average key rate, which represents the amount of computing power put into the effort and not the length of time the team had been working, puts the Amiga in 4th place.

The top team was Apple and the key was found by Peter Souer of the Starlabs team after 47% of the keys had been checked.

Next on the agenda is the 64 bit encryption algorithm. At the present rate this should take 130 years, but computer keep getting faster. This time around PPC Amiges will be helping the effort. For more info visit <http://www.rc5distributed.net>

## News in Brief

### Gateway posts \$1.7m losses

Despite record sales and a growing market share, Gateway 2000 posted a loss for the third quarter of 1997. Revenues were up \$300,000 from the same period last year, but 'one-time' charges mostly involving the purchase of the Amiga assets and Advanced Logic Research, a server manufacturer, hit profits. Gateway's income was also impacted by the long summer shipping strike in the US, which cut sales and raised shipping prices.

### E-Boutique seek loyalty

UK highstreet games retailer Electronic Boutique are introducing a customer loyalty card along the lines of the loyalty card schemes operated by many supermarkets. EB are one of the last major retail outlets in the UK regularly stocking Amiga games, and it would be a very useful thing if a large number of Amiga users registered with this scheme, making it clear to EB just what platform it is they are interested in. EB run a freecall customer service line on 0800 317778.

### Lotus Pacific announces broadcast system.

Lotus Pacific have announced a joint presentation by themselves and Chinese Central Television Teletext of the Wonder TV broadcast system based around the Wonder TV A8060. The system will provide subscribers to cable channels a host of information services including Internet access. As the dispute between Lotus Pacific and Gateway 2000 is rumoured to be near settlement, the fabled Chinese Amiga looks to be taking off at last. We have heard ringing reference to an A5800 desktop model – be sure to check CU Amiga for all the latest details as they happen.

### Micronik set-top box

Micronik appear to be entering the set-top box market with an Amiga based solution. Very few details of the hardware is currently forthcoming, but the story is that there will be a cable box initially to be followed by a desktop Internet box / multimedia station called the M-Box. We'll give more details as they come in.

# Access Amiga clones

Index information are shipping their public display/port of sale multimedia delivery system based on the Amiga. The Access is a 5 1/4" width motherboard designed to fit into a standard width drive bay. The system is sold either as a board with fascia and disk drive which slots into a standard PC type towercase, or in a half height case designed for maximum compactness.

The Access, now redesigned to take 68020 or 68030 processors, is equipped with 2 Mb chip and 2 or 8 Mb fast RAM, a sound sampler with microphone input, non-volatile RAM for configuration information, an ISA slot for low cost modems or ethernet solutions, a real time clock, CDDA input and mixer, CD file system software on ROM and an IDE interface.

It is aimed squarely at the professional display and control systems markets where it is already attract-

ing a lot of attention. We have heard of a number of people who have purchased or are interested in purchasing these machines for everything from multi-channel control solutions for theatrical sound effects to point of sale display systems for a large high street multiple. Current prices for the equipment are as follows:

Motherboard & Brackets	
1-99 units	\$415
100-499 units	\$370
500+ units	\$330
Full Access	
1-99 units	\$510
100-499 units	\$485
500+ units	\$420

Available options include CD-ROMs, hard drives

and LS120 drives. For more details contact Index information on +44 (0)1256 703426

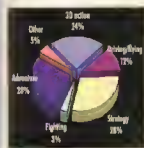




# Wishlist results from ClickBOOM!

The results of the ClickBOOM wishlist published in the July issue of CU Amiga have been published. Taking matters via post and E-mail, ClickBOOM received votes from nearly 5000 voters on what sort of games they would like to see in the future. The table opposite shows the final rankings but further tables can be seen by checking out the ClickBOOM website at <http://www.clickboom.com>. It is interesting to note the differences in voting patterns between those who voted via

the Internet and those whose votes CU Amiga collected via post. The postal voters put Quake down in 5th place. Undoubtedly this game is more popular to those with an Internet connection. On the other hand postal voters loved Theme Hospital which made it to 10th in the chart for postal voters. The differences between the two sets of voters suggests that Interneters have higher spec machines and rather obviously, that they are more keen on network gaming! Winners of the ClickBOOM games giveaways are Mr M Pearce, Croydon; Ben Coulthard, W Yorks; Frank Parker, Birmingham; all of whom will be receiving a copy of Myst, and A Skourous, Athens; Martin Sincler, W Yorks; Lewis Jones, Essex who have won a copy of Capital Punishment.



## Total votes

1. Monkey Island 3	1612
2. Quake	1482
3. Red Alert	1319
4. Settlers 2	1006
5. Diablo	931
6. Tomb Raider	912
7. Civilization 2	877
8. Grand Prix 2	843
9. X-Wing 1: The Fighter	761
10. Duke Nukem 3D	682
11. Warcraft 2	648
12. Command & Conquer	628
13. Simon the Sorcerer 2	466
14. Wing Commander 2-4	398
15. Wipeout	384
16. Need for speed	317
17. Mechwarrior	286
18. Tekken	262
19. Resident Evil	249
20. Theme Hospital	231
21. MDK	182
22. Ultima VIII	180
23. Dark Forces	180
24. Daytona	165
25. 3D Lemmings	158
26. Indy Car Racing 2	167
27. Berds Isle 2	154
28. Doom	152
29. NHL 97	143
30. Descent	140
31. Screamer 2	139
32. 7th guest	138
33. MK3	125
34. F1a	116
35. Albion	82
36. Battle Arena Toshinden	88
37. Return of Might Magic	86
38. Earthworm Jim	80
39. Virtua Fighter	79
40. Putty Squad	62

## News in Brief

### Digital cameras for the Amiga

The digital photography revolution is coming to the Amiga at last. Versalis Computer of Germany have produced image transfer software which supports the Casio QV series, Fujifilm D57, Kodak DC20 and Minolta Diimage V cameras. It includes AREXX and CyberGraphX support. Versalis are selling the software for DM99, but also sell bundles including the cameras. We hope to bring you a full review of this system soon! Until then for further information call Versalis Computer on +49 (0)2852 9140 or visit their website on <http://www.versalis.de>

### Vulcan changes

Vulcan software limited have announced a major change to the working structure of their operations. Following a similar announcement last month from Sadness software, they have announced that in the future their distribution will be handled exclusively by GTI GMBH and Weird Science in the UK. Vulcan felt that with so much of their effort being directed towards developing exciting new titles such as Genetic Species, Hell Pigs and the recently announced Virtue Cop clone Hard Target, they felt it was time to find a separate distributorship. For more details contact Vulcan Software on +44 (0)1705 862228 or Weird Science on +44 (0)118 2463900. Vulcan's web page is on <http://www.vulcan.co.uk>

## Epic sell XG



Epic Marketing will be selling the

Yamaha MU-10 midi plug in module compatible with project XG. It is fully cased, and is powered by battery or mains. It has external analogue inputs to its effects processors and midi in and out along with the serial host port. Other than that it has XG's 32 note polyphony, 678 voices with DSP effects and 16 bit resolution. MU-10 will be sold for £199.95. Epic are also working on a variety of CD projects, including a huge collection of old games. They have licensed use of OS1.3 from Amiga International to make sure they all run! Epic are looking for graphic artists for some of these projects, contact them for details. Call Epic marketing on +44 (0)1793 514188

### Amibench On-line stores

Amibench will be expanding its current services to include an on-line database of Amiga stores. Amibench has been offering an excellent service to Amiga owners wishing to buy or sell second hand Amiga gear. Adverts may be written or read via their internet web pages 24 hours a day. Now they are looking for information on Amiga stores world wide. Send details of your shop name, address, e-mail address, website, phone number and fax number to [stores@teenabb.stayfree.co.uk](mailto:stores@teenabb.stayfree.co.uk) with the word "Stores" as the subject line. For more information on the Amibench, a meet Mark Wilson on [amibench@teenabb.stayfree.co.uk](mailto:amibench@teenabb.stayfree.co.uk) or check out the web site itself at <http://thunderstorm.amibench.com>

## CU AMIGA MAGAZINE

### NEEDS YOU!

We have a vacancy for a

### STAFF WRITER

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If that sounds like you, send us a CV with an accompanying letter telling us about yourself and a 300 word typed review of a product you've bought recently to Tony Hagen, CU Amiga, 37-33 Millharrow, Isle of Dogs London, E14 9TZ



by Jason Compton: Jason Compton is Editor in Chief of Amiga Report Magazine

# Stateside News

## \$107 Million and the Long Run

It may be true that in the long run we're all dead. For Gateway 2000, in the long run it's clear that they knew that just selling Windows PCs to home users wasn't going to give them the sort of performance they wanted.

Gateway does most of its selling over here in the USA, where as you no doubt know PC prices are low compared to most of the rest of the world. That's because the PC market is so heavily competitive – getting involved is about as easy as finding a wholesale supplier, placing an ad and waiting for the phone to ring. It's gotten to the point where the PC hardware business is looked at as one of the most competitive and easiest to enter businesses in the world.

Lots of competition has the ten-

dency to push down prices – so far so good. That has the flip side of reducing profits too. In the long run we're all dead, and if we've got 50,000 computers, profits aren't too healthy either. The people at Gateway are smart, and knew that this sort of thing happens.

So not too long ago they took steps to counter the problem. They started looking at higher value (read: more profitable) products. In all likelihood, they looked at the corporate PC server market that their closest competitors did very well in. Those machines are expensive and vary high tech, and fewer companies provide them to corporations. Price competition wasn't as high, so Gateway looked for a way in. Rather than try to sell their folksy cow boxes straight to companies as a solution, they worked to acquire an established PC server

firm. Again, so far so good. Then they looked for some real value – a technology that would be theirs, lock stock and barrel, and whose

rising fortunes would benefit them first and directly. Now, it's unclear how this all worked from start to finish, but as we all know they found the Amiga and decided that they had to have it.

Nobody likes losing money, certainly not \$107 million. But before you worry about an "Amiga curse", keep in mind that it was more the mechanism of the American and worldwide PC market that reared its head this time, and that more importantly, Gateway has taken a

huge step toward remedying the problem.

The Amiga is the cure, not the disease, for Gateway 2000.



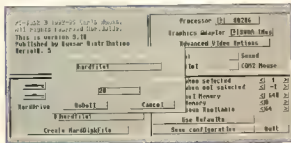
## Windows 95 on Amiga

In the race for dominance in the PC emulator market, PC-Task has achieved an important first. Quasar Publications recently released PC-Task 4.3, supporting Windows95. The company recommends this for OEO users only due to the extremely high overheads of Windows95 on the emulator. For some time, PC-Task and its rival from Microcode Solutions, PCx, supported DOS and Windows 3.1. But PC-Task can now run Microsoft's most recent offering – for those Amiga users who require compatibility with the newest PC applications. While neither program ships with any PC operating system, users

interested in emulating on a budget or in simply keeping their money from Microsoft may want to know about Caldera OpenDOS. OpenDOS is the latest incarnation of the former DRDOS and Novell DOS, now owned by Caldera and available free for evaluation use. For most purposes, OpenDOS is the functional equivalent of MS-DOS. OpenDOS can be downloaded from [www.caldera.com](http://www.caldera.com). It is not yet compatible with PC-Task and PCx, but both companies are now aware of OpenDOS and are making the necessary changes. Check out this month's CD for a demo of PC-Task 4.3 as well as the fully working version 3.1.

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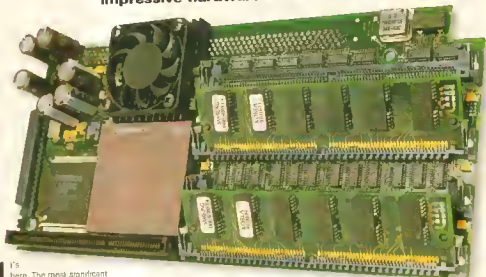
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# First look at PowerUp

Woo! Look what turned up in our post bag, phase 5's lovely new Cyberstorm PPC from Power Computing. We take a preliminary stroll around the impressive hardware ahead of next month's review.



► That's it, that's the card we've all been waiting for. It's a loaded up Cyberstorm PPC for any big-box Amiga with a fast slot. That little 200MHz PowerPC 604c is on the fast side too!

It's here. The most significant upgrade for the Amiga since AGA five long years ago. The leap from an 80s architecture CPU to state of the art computational power. Phase 5's PowerUp project threatens to address the Amiga's weakest area and propel it beyond the capabilities of high and PCs. We're talking about the PowerPC processor family whose lowest member is twice as fast as the 68050 and with seven times higher clock rates. That's on the nippy side.

The first PowerUp model to appear is the Cyberstorm PPC. This is a big box so-called

'fast slot, connected accelerator which fits A3000s and A4000s. Also, importantly, it will fit the forthcoming Amiga clones also equipped with fast slots. The Cyberstorm PPC is phase 5's no compromise expansion with some seriously groovy interfaces.

Fitted with a 64-bit DMA interface, phase 5 have stated this port for use with their forthcoming Cybervision PPC. This will be 2D and 3D graphics far and away beyond any existing Amiga video card and even beyond that of most PCs.

## Outrageous power

Excited yet? Then there's that Ultra Wide DMA SCSI controller from Hall. The awesome 53C770 controller is capable of driving the latest, largest and best hard drives on the market at speeds as fast as hard drives currently go. We're talking about outrageous CPU power, outrageous graphics power and outrageous hard disk I/O. It's unbelievable! But this is the first stage in the Garmen PowerUp masquerade. The part everyone is excited about is the PowerPC 604c sitting next to the large 68060 chip. So far this is only starting to be exploited by software and its authors. Some developers have had access to Cyberstorm PPCs for a few months but the lack of a proper Amiga native PowerPC compiler is the next hurdle in the PowerUp evolution.

Work is progressing all the time and there's already a small collection of



► phase 5 uncovers the fruits of their masterplan to get the Amiga back on top

## It's a PowerPC!

Underneath this heatsink is an innocuous looking small 2cm x 2cm chip. It just happens to be a 200MHz PowerPC 604e and it's on the fast side. It likes to talk to the RAM in the four SIMM sockets through a real 64-bit wide 66MHz bus which lets the PowerPC go even faster. This also helps

the companion 680x0 CPU such as the 68060 pictured.

## Scuzzy!

And not only old SCSI either. The 53C770 chip here is a state of the art Ultra wide SCSI controller capable of driving the newest, largest and fastest modern SCSI hard drives on the market. Just to the left you can see the UW SCSI connector, it's going to be tricky to find a cable...

PowerPC supporting programs. Some of the key software support provided with the Cyberstorm PPC will be greatly improved next month and it's then that we plan to review the Cyberstorm PPC from start to finish and take it through the hoops.

## Minicucle PowerPC

At that's to see of the PowerPC on the Cyberstorm PPC is a small heatsink and fan array smothered than the bare 68060.

Removing this, a minicucle chip can be found that's only 4x4cm in size. The difference in technology has never been more obvious when comparing the tiny 200MHz square compared to the huge 680x0 chip. The small jungle of bulky capacitors next door are part of a power conversion circuit as the PowerPC requires 3.3V instead of the Amiga's universal 5V.

The CyberStorm PPC's four SIMM sockets must be used in pairs as the entire design sports a 64-bit path to memory on a bus running at 66MHz. Even the 68060 benefits from this memory interface making the Cyberstorm PPC the fastest 68060 card we've yet seen.

No doubt the ultra wide SCSI port on the card will cause some wiring confusion in the short term. No one seems to supply cables to connect existing hard drives and external devices to it yet. For this reason alone, those tests will have to wait until next issue.

We're expecting nothing short of astounding performance, needless to say. The graphics port should be particularly exciting for games. When phase 5 brings out the CyberVision PPC the 3D capabilities of the Permedia 2 can be compared to those of a Nintendo 64 in high resolution. Coupled this with the CPU power offered by a 604e and there's no 3D game anywhere that wouldn't look stunning on this combination.

## Is it really worth it?

This last card not cheap by any means. Initially available in only the pedigree 200MHz 604e and 50MHz 68060 varieties. Hopefully the initial rush of professionals and the must-have maniacs will die down quickly and phase 5 can ship the economical varieties with 68040 and 150MHz 604es. After all, they do have to finance the development of the add-on cards.

Right now, the most use of a Cyberstorm PPC is to be had in the fast 68060 system. Then, assuming you can find the cables, the incredible SCSI on board. So for many, the time for PowerUP at these prices is not right.

However, work progresses on the far cheaper Amiga 1200 PowerPC 603e versions and by then, software support will be far more wide spread. Shareware authors heaving access to PowerPC is what PowerUP really needs to succeed. If you want to take an expensive slice of the future, here and now,

you won't be disappointed in the short term, or the long. The rest of us wait eagerly for news of the A1200 units also next month.

Rumour is that there will be some big announcements of key companies being enticed back to the Amiga on the basis of PowerUP. Stay tuned. Things are hotting up.

## Software at a glance

Phase 5 initially shipped the Cyberstorm PPC with some shaky installation software although the printed installation manual is an improvement. The CD contains some PowerPC demos and some developers material for card based on the free GNU C compiler. There's was no serious native compiler or in-depth documentation available initially.

The demos include the suitably impressive LW Show, a utility for displaying Lightwave objects very very quickly. There's also a fractal explorer, MPEG video player and an MPEG audio layer III player which we found impressive. The former naturally support CybergraphX for fast realtime MPEG video player (even VideoCD) and the latter supported AHI for output to Paula or 16-bit sound hardware alike.

It sounded superb and all the hard work was done by the PowerPC. ■

Met Bettinson

## Is PowerPC really the saviour of the Amiga?

Not quite yet, but if all goes to plan it will be. The Pentium's progress left Motorola's 680x0 CPUs far behind long ago, and even the desirable 68060 can't touch the new generation of Pentiums. As a result the Amiga is stuck with a brain that now looks hopelessly out of date. But look, what's that galloping towards us from the horizon in a cloud of dust? Yes, it's Motorola's new PowerPC chips! They've come to save us. They'll give those PCs a run for their money, and transform our Amigas into super-charged beasts capable of handling all kinds of applications that are just plain impossible with just a 680x0.

Once the CPU has had such a radical upgrade, the doorway is open for the rest of the Amiga's architecture to get similar treatment, from improved graphics displays and audio processors to ultra-fast I/O interfaces. So the answer is yes.

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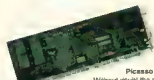
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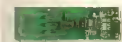
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## phase 5



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# Blittersoft



# AIR Link

## Part 2

Last month we built the fabulous DIY AIR Link. This month Nail Bothwick dives in the deep and and tackles some practical applications.

**W**hile last month's excellent AIRLink DIY project, you can now interface your Amiga with almost anything that sends or receives infrared signals.

Obvious examples include using a TV remote control to run programs on your Amiga or using the Amiga to control your TV, VCR, Hi-Fi etc. The uses are endless, limited only by your imagination, but first you've got to get AIRLink talking to your infrared device. First we will look at setting up AIRLink to work with your equipment and then try a few examples using InfraRexx.

### Setting up

The basics of using InfraRexxDaemon and InfraRexxEditor were covered last month.

The most critical part of the setup is the bitrate; if this isn't right, things will not work properly. The bad news is that there is no easy way to determine the bitrate of a unit; only trial and error. The good news is that there are only a handful of common bitrates used by the majority of handsets. The rates used by the sample codesets from InfraRexx are shown in table 1.

If your hardware is not listed here then you will have to make a guess where to start. Since you will need to stop and start InfraRexxDaemon quite frequently during the setup process, it will be easier if you leave its icon out on the Workbench for now. Quit

the daemon if it is running, start the editor, create a new entry and select edit.

The most important gadget here is the one containing the infrared bitstream. Once you learn a code it will contain a string of 1's and 0's corresponding to the pulses of the infrared signal.

Now select Learn and press a button on the remote control. Then repeat the process, watching the contents of the bitstream gadget. If they change it means AIRLink isn't seeing the same code each time, so you have the wrong bitrate. Exit the Edit window, change to another bitrate setting and try again.

Once you achieve consistent results from repeatedly learning the same button you have a good bitrate setting. It is worth taking the time to get the bitrate absolutely right for the first button, if you find you need to change it later on you will have to re-learn any codes you have already learnt.

Now we can learn some codes and assign commands to them: the first thing to do is make sure you have a DEFRECEIVE tooltip set in InfraRexxDaemon, this will alert you to any unrecognised signals. Copy the Flash command from the cover disk/CD to C and add the following tooltip to InfraRexxDaemon:

DEFRECEIVE="address command flash"

This will either flash the screen, or do whatever alternative you have configured in Sound Preferences. If the daemon was already running when you changed the tooltip, you will need to stop and restart it.

### Playing music

The first example uses AIRLink to play music through HippoPlayer, which is in the CDSupport drawer of most CUCDs. The ARexx port of HippoPlayer is called, surprise, surprise, 'HIPPOPLAYER'. To program a button to start playing CD, create and learn the code for a button on your remote control, then set the ARexx receive command for that button to 'ADDRESS HIPPOPLAYER PLAY'. Note the single quotes surrounding the command, these tell InfraRexx that this is an ARexx command to execute, not a script to run. You can now do the same with other buttons for Stop, Fast Forward, Rewind etc.

This is fine for buttons that always do the same thing, but most remote controls come with a single Power button to switch on and off. This is where InfraRexx's ability to run ARexx scripts is so useful, and the scripts don't need to be complicated as you can see from Table 2, it only has two lines. The first line checks for the presence of HippoPlayer's ARexx port and starts the program if it doesn't find it. If the port is already there, the second line sends it a QUIT command. Save the script as REXX HippoStart.m and set the ARexx

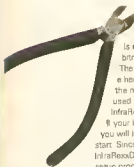


Table 1

1125 Philips Reflex
1667 Sony
1800 Canon
1818 Akai Canon Hitachi Kenwood NEC
Tasc Yamaha
1796 Onkyo
1887 JVC
2500 CDTV Panasonic Pioneer Samsung
Sony Technics
3636 Sharp

Table 2

```

HippoPLAYER on and off via
ARexx ?
Show P "HippoPLAYER" = 1 then
  ess command Run >NIL
  J CDsupport/HippoPlayer/Hip
  se address "HippoPLAYER" QUIT

```

...eve command for the Power button to Start with no quotes. Restart the de- and the power button turns HippoPlayer off, just like a HiFi system.

... could use the same principles to with any module or audio CD player. An ARexx port, just by changing the address and commands. I use AIRlink to play CDs through YACDP using a remote

This is only the start of what you can do in terms of controlling your Amiga with a remote. A module or audio CD player is a good first step, most player programs ARexx commands for the menu func- and it is genuinely useful if you have Amiga in your living room, hooked up to decent set of speakers.

## Controlling an infra device

...ample of controlling an external from your Amiga would be to have it your video recorder, taping programs a list whenever you are out.

... video recorders have timers, but have to remember to program them time, and repeat timers usually require beforehand the recorder is switched to mode. How about setting your Amiga automatically record all of your programs? All you need to do is sure there is a tape in the VCR and your Amiga is switched on.

This example assumes you have a way of ing arexx script at regular times, like CyberRun or Recall will do. CyberCron is on the CD. These pro- allow you to specify that a certain tasks piece at a particular time on ed days. In this case the action would run the ARexx script in Table 3 with some details. You can set it to run at me before the programme is due to oved it is the same day. You call the with this command

```

reStartVCR.rexx Channel StartTime Length

```

... that it is rexx net rfx since this is called by you to control ... not the other way

... time needs to be the standard format (using 4 = 100 clock) and length is given es. For e to

record Coronation Street at 7.30pm you would use

```

rxStartVCR.rexx 3 19 30 30

```

This script is quite basic, there's no checking that the information you give it is valid. You can add this sort of check if you wish, but it's not much point if the script returns an error message when you are not there, so give it the right information to start with. Don't type in the line numbers, they are there for reference only and be careful with the quotes, it is important that you do not mix up single and double quotes. Save the script as

```

REXX StartVCR.rexx

```

Line 9 reads in the variables you have given it. Line 12 pops a requester up on the screen telling you what is going to happen. This means you can for example turn the VCR off if it is on and you want to watch the program instead of record it, as well as warning you that it is about to start, so you can set the script to be run 5-10 minutes before the programme is due to start. Line 13 uses the AmigaDOS WAIT command to pause until the time reaches the programme's start time. You could add a bit of ARexx here to subtract a couple of minutes from the start time to start recording slightly before the programme's start time.

Lines 14 and 15 do the real work for at least tell InfraRexx to do it by sending commands to the video recorder to change to the correct channel and start recording. Lines 16 and 17 wait until the programme has finished and then send a Stop signal to the recorder. Finally Line 18 lets you know that recording has finished.

There is a lot more that could be done with some more ARexx, but this isn't an ARexx tutorial. If you know some ARexx already, have a look at ways of starting recording a minute or two early and stopping five minutes late. You could also use ARexx's own Delay() function instead of Wait.

This only scratches the surface of what can be done with InfraRexx. There are programs available to allow your Amiga to respond to voice commands, you could amaze friends and family with your ability to control household appliances merely by talking to them! Don't forget the competition for the best uses of AIRlink.

## No ARexx?

All of this assumes that the program you want to control has an ARexx port, but not everything does. There are two solutions to this. Firstly you can use any AmigaDOS commands through ARexx by using

the command port. The use of 'address command flash' for the DEFRECEIVE toolbar illustrates this for a more flexible approach, there is a program provided with AIRlink to send input events (key presses, mouse clicks etc.) to your Amiga. Put REXevent and its icon in WBStartup to have it available whenever you use your Amiga.

To send an event with REXevent you send it to REXevent's ARexx port. Start REXevent and add address REXEVENT "<command>" to a button on your remote control. A list of the qualified key commands can be found in the Commodore's section of your workbench manual. The "<" ">" brackets tell REXevent to process these two keys together, make Workbench think you have held down Right-Arrow while pressing E.

OK it's a pretty useless example, so here's something better. 'address REXEVENT "<rawkey command up>" will move the mouse pointer up. A CDTV remote control has joy-stick style buttons, so you if you like you could use it as a cordless mouse/joystick by adding the relevant commands to each button.

CD users may like to check out InputStream in the Magazine drawer: it is similar to REXevent but with more features, like direct control of mouse position. It also has a more complete description of the available input events.

That's it for now, remember the competition announced in last month's CU Amiga for the best ideas for AIRlink. ■

Neil Bothwick

Table 3

```

1) ?
2) instruct InfraRexx to record a specific program on your VCR
3) This assumes you have configured the following ARexx Transmit commands
4) VID_STOP
5) VID_RECORD
6) VID_1 to VID_6 for the channel select buttons
7) "*"
8)
9) parse arg Channel StartTime ProgLength
10)
11) address command
12) "Run >NIL RequestChoice >NIL AIRlink "Recording channel" Channel "at StartTime" "OK"
13) wait until StartTime
14) address "INFAREXX" "VID_" | Channel
15) address "INFAREXX" "VID_RECORD"
16) wait ProgLength mins
17) address "INFAREXX" "VID_STOP"
18) "Run >NIL RequestChoice >NIL AIRlink "Recording of channel Channel finished" "OK"

```





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# The Net on Speed

**High speed 56K modems have arrived and the cost of ISDN has fallen. We take a look at surfing the Net at unparalleled speed and unveil a new free Net trial.**



In the last few years the Internet has moved from being the domain of the rocket scientist to a tool for the masses. It's now common belief that every company must have a web site and if you can't E-mail them, they clearly aren't a modern happening company. CU Amiga has run two main Internet deals specifically for Amiga owners: the first with InternetCity and the second with Wirenet. We've also ramped up our Net coverage and implemented the comprehensive CU Online to match the ever growing number of Amiga users on the Net.

The latest and greatest thing to arrive in this area are the new high speed 56K modems. Probably because of this fact, telecom operators have taken a fresh look at the ludicrous charging structures for an older, yet faster, technology. That technology is Integrated Subscriber Digital Network (ISDN) and the bottom line is that it's still much faster than modems and it's cheaper than ever. As a tribute to the thousands of die hard Amiga Net heads who bombarded us with E-mail every day, CU Amiga takes a look at 56K modems and ISDN.

When using a standard telephone line your telecoms operator is essentially using an 8bit sampler each way and an 8bit sample player. The sampling rate used is 8KHz which gives rise to the nasty sound quality. A Modem turns data to and from your Amiga into sound which goes through this process

of being sampled, turned into digital information, turned back into analogue and the modem at the other end turning it into digital again. It's complex and it's really quite unnecessary.

All an ISDN line is, is a telephone line minus the analogue to digital and digital to analogue. So it's amazing that the telecoms operators charge so much more for installation and rental though thankfully it's lower now. The ISDN equivalent of a modem is a 'terminal adaptor' or TA for short. This just interfaces the 64kbps stream to your computer and also looks after buffering, data compression and the MultiPPP protocol if you want to combine both channels.

ISDN comes as standard with two 'B' channels which have a 64kbps capacity each. If you really want the ultimate in domestic Internet connection, it's possible to combine the two with the MultiPPP protocol and have a single 128kbps connection to your Internet Service Provider. I find it more practical to use 64k only and stay on for longer since many tasks can be done at the same time and it ends up more efficient over time. ISDN has several more differences also, the main being that when a connection is requested to a telephone number there is no dialling and no modem rate negotiation. There isn't even a log in procedure to enter username and password.

Connection is virtually instant because

## ISDN service table

Min contract:	2 years
Connection:	£293.83
Rental Qtr/Yr:	£157.16 / £628.63
Call Allowance:	£123.38
Cost Per Year:	£559.25
Cost First Year:	** £739.08

Call allowance reduces to £279.25

Min contract:	1 year
Connection:	£587.50
Rental Qtr/Yr:	£157.16 / £628.63
Call Allowance:	£417.13
Cost Per Year:	£211.50
Cost First Year:	** £779

Call allowance reduces to £279.25

## LOW START

Min contract:	1 year
Connection:	£470.00
Rental Qtr/Yr:	£103.40 / £413.60
Call Allowance:	N/A
Cost Per Year:	£321.88
Cost First Year:	** £883.60

Call allowance reduces to £279.25

\* assuming you use all of the call allowance

\*\* Installation and rental only (These prices all include VAT)



...uted in milliseconds, the 64K is instantly detected by the ISPs. ...s and the PAP/CHAP username and password system is used rather than a script or a BBS style login.

What does one need to get ISDN for the Amiga? Firstly a normal telephone line isn't adequate, so you need to get an ISDN line installed. This done, you'll have a box on the wall with an ISDN jack on it. Next you need a Terminal Adaptor. Naturally for the Amiga we'll be wanting an external one.

There are generally the best anyway. Then we need some form of high speed serial device for the Amiga to do the ISDN TA justice. The serial port is stressed on the 56K modems, let alone ISDN! Finally, we'll need an Internet Services Provider (ISP) that supports ISDN dial in.

There's no doubt that ISDN is more costly than a little more complex. It's not one for the casual web browser. However if you like me, spend whole evenings web browsing, downloading or even intend to network a few machines up to the same connection, ISDN is just the ticket. It's fast, it's reliable and it's the next greatest Net status symbol after your own domain.

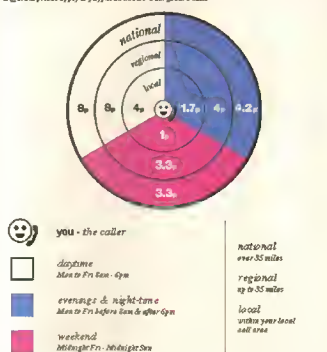
### ISDN experience with BT

It seems BT are paranoid about not making enough money (I would have thought £100 a second profit isn't bad) so there are numerous factors to influence which package is best for you, if any at all. If you take a look at the BT ISDN table, no matter which service you choose, you can expect to pay between £80 and 800 pounds in the first year before the costs. Holy cow it's not cheap.

Start Up is the most common with the lowest installation charge. However the high monthly rental and a minimum 2 year contract can be hard to swallow. It's still the cheapest

### pence per minute for a UK call

5p minimum charge for all calls, prices include VAT  
Different prices apply to payphone and BT Chargecard calls



BT's telephone pricing structure at a glance. Use this table and then apply the discount schemes mentioned elsewhere for the actual cost.

overall for the first year cost. Low Start can be attractive for the 1 year minimum contract and low rental. It requires an initial outlay twice as much as Start Up. Either way it looks like BT isn't short of a bob or two.

If you do have a cable operator in your

area, give them a call and find out what they charge for an ISDN service suitably armed with BTs as a comparison. We didn't find anyone at Cable and Wireless - who much of the UK cable franchisees - and Mercury, who would be helpful at all in providing ISDN pricing. BT offer incentives for ISDN from time to time. You'd be well advised calling BT's ISDN hotline to check and see if there's a current scheme (ono was about to expire as we went to press) and ask any other ISDN questions you may have. BT's ISDN hotline is 0800 161 514.

### The Final Cost

#### Discount schemes

BT used to keep its discount schemes a secret until the competition hotted up. There are two types of service, business and residential.

For some reason BT refuse to acknowledge that an ISDN can be residential so an ISDN service is classified as business. Your standard telephone at home will be residential. It's supremely important to be aware and generally to sign up to the discount schemes to save money on call charges.

#### Residential.

The greatest BT discount scheme which is still under utilised by Net users is the so-called Premier Line. £28 20 per year gets you a global 15% off all calls. Virtually any

### ISPs supporting ISDN, K56Flex and X2

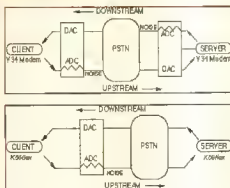
Wirednet/Unet	01925-490482	Yes	Yes	Yes	Yes ***
Demon	0181-3711000	No *	No *	Yes	No
Enterprise	01624-677666	No *	No *	Yes	Yes
UKOnline	01740-333333	No *	No **	Yes	Yes
Pipex	0500-474739	Yes	No	No	No
Virgin	0500-958800	Yes	No	Yes	No

\* These ISPs claim to be waiting for the official 56K standard to emerge, despite the fact that existing X2 and K56 ISP modems are upgradable to the standard.

\*\* Support was claimed to be coming soon

\*\*\* There is a charge for using 128K ISDN

It is true that several of the ISPs are refusing to commit to offer X2 or K56. It's worth noting that we are yet to see an X2/K56 modem manufacturer who does not claim their modem will be upgradable to the official standard when it arrives. However it would be a very good idea to ask how this is accomplished. IE flash ROM upgrade, return to base chip change etc.



▲ On the top is a basic diagram of a Y34 33600 baud modem. The data path way must be turned into either an Analog to Digital converter and then down speed in the complex conversion. On the bottom we have K56Flex which allows straight through communication from the server to the client. The result is a higher download speed.

one falls into a usage category where Premier Line pays off. You also get Talking Points for your phone bill which can be exchanged for Air Miles. Friends and Family is free so everyone simply must sign up. This gives a 10% discount on 10 nominated numbers. So with both schemes in place the discount is 25% off local calls which is identical to Business discounts.

The difference is Business discounts get a substantially higher discount on national and international calls and there's a charge for the Friends and Family equivalent. Still on the weekend, calls cost 45p per hour online with both discount schemes. Pretty good actually.

#### Business.

The Business equivalent of the Premier Line is called Business Choices. It comes in 5 tiers for ever increasing bills, normal home usage will really only be interested in Business Choices 1. For a charge of £5.88 per quarter, you get 20% off local calls and 27% off Regional, national and international calls. This is actually quite impressive compared to Premier Line as it reduces the cost of a Net call on weekends to 48p per hour.

However the Business equivalent to Friends and Family is a little less impressive. Key Numbers costs a once off fee of £10 and gives a saving of 5% on 10 nominated numbers. Naturally one of those will be your ISP number. This is on top of the 20% discount for Business Choices so the net saving is 25% so that an hour on the weekend will cost 45 pence. Not bad.

#### Conclusion

While I doubt that anyone would argue that BT aren't being greedy with their ISDN connection and rental charges, the on line charges for ISDN and regular telephone lines is lower than it's ever been. 45 pence per hour isn't a lot to pay for an hour on the Internet on the weekend. A normal modem

service with a couple of hours a weekend of use is only going to cost £3.60. If half your money goes to the ISP account, and half to phone costs,

£10 per month for ISP account.

£10 per month BT charges = 1.75 hours during the week (off peak) and 2.75 hours on the weekend per week.

£20 per month gives 4 and a half hours of Internet access per week. This is really incredibly good value for what you get. It works out, inclusive of VAT, that a pint of beer in a pub costs the same as 4 hours of Net access.

#### Buying X2 or K56 Flex

When considering a 56K modem, it's important to check which ISPs support the standard of modem you are considering. Virtually all ISPs support ISDN at least with single channel as it's a standard feature of the modem racks they use. All of these ISPs feature free web space but only Wirenet and UKOnline offer official Amiga support. Virgin in particular will need to be harassed into releasing the details to set up manually rather than using their PC software.

The latest 56K modems are finally seeing analogue modems pushed to the limits of what's possible. To get higher rates than 33600bps, these new modems exploit the fact that the signals are travelling along digital lines from the exchange to the home. This way they attempt to encode data in sync with the 8K sampling rate that the telephone system uses.

The result is that these modems can achieve higher download rates than the 33600bps maximum of standard modems. The rates achieved vary greatly according to the quality of the line but they very rarely approach the 56K rates the modems are sold as. However, any improvement is a welcome improvement and the 40-48K typical 'connects' are noticeably faster than 3360 modems. The greatest problem at the moment is that there are two conflicting standards.

One is US Robotics' X2 and the other is Rockwell/Lucent's K56Flex. The latter is gaining popularity in the UK and there are several brands of modems supporting it where as only US Robotics modems support X2. Performance wise, we've tested both and found that they perform differently on different lines with K56 being faster on one line and X2 on another so there's little between them.

The future pitfall is that both proprietary standards will be obsolete when the official standard is announced early next year. Most 56K modems are shipped with flash ROM upgrades so that they can be reprogrammed to support the new standard. The problem arises when there's no direct Amiga support, which is the case with all of them that we are aware of. APC needs to

be used to upgrade the modem so it's worth checking if you can send your modem back for a return-to-base upgrade and what if any, charges will result.

#### ISDN, Modems, the future

The choice between installing ISDN or using a 56K modem isn't such a difficult one.

Because of the very high price differential you'd have to be mad about your Internet connection to consider ISDN over a standard modem. That said, ISDN is normally 50% quicker than 56K modems for download - nearly twice as fast for uploads. It also has the capability of moving to 128K dual-channel for seriously fast speeds.

Neither of these systems is ideal, however. Many of us would like a permanent non-time-limited connection at faster rates still. In these terms the holy grail is the Cable Modem. Connected to the cable telephone network, these provided near Ethernet speeds 24 hours a day.

At the precise moment these are being trailed at venous cable companies in the US, as usual a long way behind the wide spread availability in the US and mainland Europe. In the case of Cable Modems and ISDN, the thing that you should do is call your local cable operator and find out if they supply these services.

The next 'big thing' on the horizon is the provision of Internet connectivity through electrical sockets. It might sound crazy but some electricity providers and Internet Service Providers are taking this very seriously. Smaller homes have electrical wiring research is nearing completion of modulating Internet data onto the power lines. This avoids the necessity of having a cable company serviced area or using conventional pay-by-line telephone services.

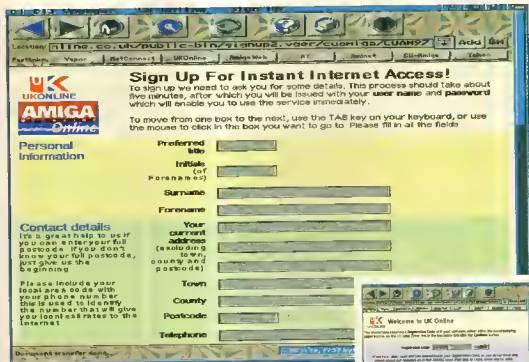
The result is similar to cable modem except one doesn't need cable to the home to use it. In the short term Cable modems are likely to be the next technology readily available with the 'electric internet' following much later. Let's hope some of these next generation Internet connectivity options arrives sooner rather than later. ■

Mat Bettinson



# Free Internet Trial

We've run Internet connection offers before but this time we have a free trial that won't cost you a penny. Try it out!



**Sign Up For Instant Internet Access!**

To sign up we need to ask you for some details. This process should take about five minutes, after which you will be issued with your **user name** and **password** which will enable you to use the service immediately.

To move from one box to the next, use the TAB key on your keyboard, or use the mouse to click in the box you want to go to. Please fill in all the fields.

**Personal Information**

Preferred title:

Initials (of Forename):

Surname:

Forename:

Your current address (excluding town, county and postcode):

Town:

County:

Postcode:

Telephone:

**Contact details**

It's a great help to us if you can enter your full postcode. If you don't know your full postcode, just give us the beginning.

Please include your local area code with your phone number. This is used to identify the number that will give you local call rates to the Internet.

CU Amiga has run two readers' Internet connectivity deals in the past. Both have been incredibly successful with hundreds and hundreds of Amiga users signing up to get Netted. This month we've concluded a deal with UK Online to offer a month "free trial" in addition to the free NetConnect Lite software on the cover CD.

UK Online tell us they have just started supporting the Amiga to the "full NetConnect Lite - a 100 day one hour session version of the full NetConnect CU Amiga superstar rated package is available for free UK Online subscribers are able to take advantage of a special upgrade price to the full version of NetConnect for the special price of £39.95, a saving of £15.

In addition to normal Internet services such as the World Wide Web, E-mail and so on, UK Online will be offering some of the most important Amiga sites in the world. The first two of these sites are Amiga Web Directory and the Vaporware support site (much of the NetConnect software in the ongoing term a full Amiga mirror will be in place. There is currently only one Amiga

mirror in the UK which is updated sporadically by UK Online claim that their Amiga mirror will be automatically updated once a day. So all the latest Amiga files will appear quickly with highspeed local download rates. That is extremely good news for Amiga Net users in the UK and demonstrates UK Online's commitment to Amiga support.

After installing NetConnect and running for the first time, you will need to enter your login name and password. To activate a trial account, fill these in as:

Login Name:

Password:

Leave the rest of the boxes on this screen blank.

When installation has finished you need to start up the Internet connection using the Start/Stop icon in the Internet Dock. Then you need to fire up Voyager using the WWW icon. At this point you need to type

<http://www.ukonline.co.uk/public-bin/signupcuam97> where it says Location



just below the navigation buttons.

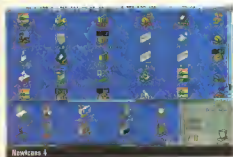
Fill in the form you find there. The first thing this form will ask you for is your Registration Code: this is CUAM97 (all caps). Please note that you will not have to supply a credit card number or such like. After the form has been filled in you will receive your own login name, password and E-mail address - write all these down! Close down Voyager and disconnect from the Internet using the Start/Stop button that's in the Internet Dock.

Start up the AmTCPPrfs program. Go to the user section and fill in the Login Name, Password and E-mail Address with the details you just received. Enter your name into the Real Name box and click on Save.

You're now ready to go and use your trial account for the next 30 days. You'll also receive a letter and an E-mail telling you how to continue using the service if you like what you see.

# Freeware Round-up

We round up some of the best freeware in recent months and ask why the authors chose not to charge for this fabulous software.



## New Icons 4

Rather than just an icon set for Workbench, NewIcons is a completely new icon system which solves the problem where a fixed palette is required for Workbench icons to render correctly. This is evident from the horrible tones of Magic WB icons when not using a Magic WB palette.

New Icons 4 comes with a 32 colour icon collection for your standard Workbench drawers, distinct in the 3D isometric form. The images are stored in the icon images in the tooltypes of the icons, and the colours are re-mapped from whatever palette you may have. These become invisible when the newIcons patch is running. If the patch isn't running, you see the standard icons.

There's been several major improvements to the New Icons system over time and the catalogue of New Icons collections has grown considerably to rival the shareware Magic WB. One of the recent additions is that icons can now be transparent rather than bordered with a bevelled box which Workbench insists upon. The result looks superb as icons float on the Workbench. Version 4 is also considerably faster than earlier versions. Even advanced Workbench



replacement software like Directory Opus 5 has been quick to recognise the popularity of New Icons and now fully supports the system internally. It even allows individual turning on and off of transparent icons. We like the look of New Icons a lot at CU Amiga and it's been adopted as the icon standard for CUCDs although longgraphics is still used for the standard icon set.

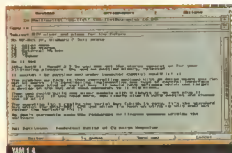
Whether you wish for the New Icons look or would rather use the package for your own high colour icons then it's just the trick. In lieu of a Workbench update fixing the icon shortcomings, New Icons does an admirable job of making Workbench look much smarter and modern. The installer is only too happy to remove the New Icons if you don't like it so you're nothing to lose.

E-mail package on the Amiga. There are two simple reasons for this, firstly it's very good and secondly it's totally free. Something YAM shares in common with the rest of the software featured here.

The Swiss Marcel Beck originally attempted to operate YAM as freeware but where one had to apply for a key which was free he'd have an indication of the number of users. He was swamped with thousands upon thousands of requests to the point where he gave up and reverted to standard freeware. YAM is an all in one package based upon MUI, which has built in text editing/E-mail composition facilities. MIME and UUencode encoding and decoding for E-mail attachments and a built in POP3 client for downloading the mail from the Internet Service Provider. All that means there's nothing extra to set up, it works out of the box.

However in the tradition of excellent Amiga software, it starts off simple but gets as complex as you'd like to go. It has an extensive ARexx interface and the Amnet is littered with YAM scripts to run everything from mailing lists to downloading of files from the Amnet via AmFTP.

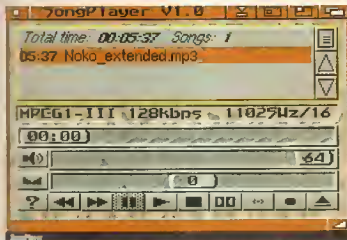
The standard filtering options are there so you can import mailing lists into their own folders by matching certain rules. YAM is a superb mail client but it's not perfect with some performance issues. Fortunately Marcel isn't sitting on his laurels and YAM



## YAM

YAM has got to be the single most popular





is due to be released later this year. A fact which has a great many Amiga Internet users excited for good reason.

## SongPlayer

Stephane Tavernard has been responsible for a great many "I told you so's". The Frenchman has put in serious effort at writing programs to play back MPEG audio streams. Starting with the initial so-called Layer I and Layer II types, Tavernard wrote an assembly optimised player for Deliracker capable of playing in real time. It was thought impossible that even a mighty

68060 would be capable of playing the latest format: MPEG audio Layer III. The latter took off in popularity on the PC albiast with the legally dubious practice of circulating copyright material on the Internet.

Layer III provides around 12:1 compression of CD quality audio and results in playback quality indiscernable from the original at this compression level. At lower bitrates and higher compression still, Layer III comes into its own as an FM radio quality system with massive compression for use by spoofing audio over the Internet.

Tavernard's first Layer III product, MPEGa has been constantly revised getting faster and faster each time until it consumes less than 50% CPU power on a 68060 at full CD quality output. Every time they said a couldn't get much faster. Every time we were proven wrong. Now even 030 users can play Layer III streams in mono with frequency division. SongPlayer takes the MPEGa Layer III engine and applies a fine looking GUI and play facilities for uncompressed samples as well as all MPEG audio layers. The result is a program that's staggering in its efficien-



cy, capability and quality. Hats off to Stephane for making MPEG audio possible on the Amiga with his impressive programming talent.

## MCP 1.30

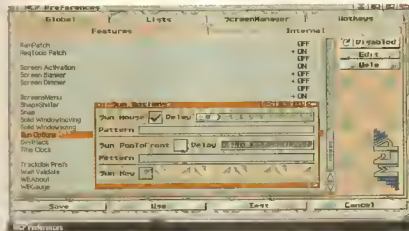
It's common for Amiga users to install Workbench enhancing patches in their start up sequence or WBSStartup. The only common goal of these patches is they enhance or alter the behaviour of the Amiga's operating system. The problem is that power users tend to apply many of these until their user-startup is littered with programs.

The German duo Stefan Semmerfeld and Michael Knoke created MCP or Master Control Program, to this end. MCP is a massive collection of the hacks and enhancements found in most of these commodities. Fortunately any or all of them can be activated through the use of the preferences program which runs separate to the patch itself, installed in the startup-sequence. A small selection of MCP's patches include, AlertGuru capture and logging, CopyMemQuick, Crunch patch, DOS wildstar, font search and cache, Force NewLook menus, Format Protection, Mouse acceleration, screen blanking, Quick draw and layers patches, CPU settings, requestor patches, screen manager, solid window moving/resizing and more. Lots more in fact.

MCP even has the functionality of Assigns Manager built in so that system assigns can be managed via a GUI rather than installed into user-alterup. This is much quicker when starting up. There's also hotkey managing and the excellent Tools Alias which will search for Tool Types patterns and launch your own application. All those horrible More variations with hard coded paths will load your favourite text view for example. MCP will even force certain applications to use fast memory rather than chip and time out requestors automatically. Phew.

There's no doubt, MCP is the ideal system enhancing program for your Amiga. Though it's infamous for causing problems with some software which is not surprising given the range of hacks and enhancements it offers. So with careful use and turning off of unnecessary patches, it extracts a lot out of the Amiga and it won't cost a penny. Gosh it is good.

Mat Stebbins









Yes, it's here at last! One of the most eagerly awaited games of all time - and I could be talking about the review of *Champ Man2* or the massive preview of

*Myst* here... chuck in new RPG *Blade* and the last few hints and cheats for *TFX* and you should find plenty to get on with.

## Reviews

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## Tips & Guides

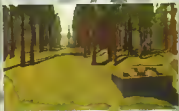
- 50 More *TFX* Tips
- 52 *Tips Central*



# Screen Scene

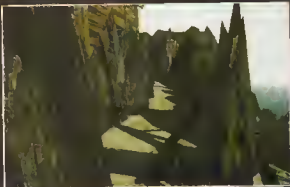
# Myst

preview



"You have just stumbled upon a most intriguing book, a book titled *Myst*. You have no idea where it came from, who wrote it, or how old it is. Reading through its pages provides you with only a superbly crafted description of an island world. But it's just a book, isn't it?

As you reach the end of the book, you lay your hand on a page. Suddenly your own world dissolves into blackness, replaced with the island world the pages described. Now you're here, wherever here is, with no option but to explore..."





**W**elcome to Myst. Myst, yes, I'm sure... a world of wonder and enchantment, rising out of the fog of the unknown. Welcome to the biggest-selling CD-ROM game of all time, and prepare to be amazed.

Myst is the brainchild of brothers Rand and Robin Miller. When it was released a few years back it was something entirely new and innovative. It's an adventure game, but one which takes in pictures, not words. It's a non-linear gaming experience, controlled by an intuitive system of mouse

clicks. It has obsessed adventure gamers by the thousands, and spawned an entire industry of re-releasing, from books to posters to baseball caps. At last, thanks to Canadian softy ClickBOOM, Amiga users can share that experience.

## Playing the game

Myst is that game which can be explained by telling you the plot. It isn't like that. You are the game standing at the docks of the island of Myst. Ahead of you the path leads to strange, cog-like structures on the top of a hill. Beside you the mast of a sunken ship pokes out from the still, blue-green water. You know nothing about the place you are in, are no introductions or explanations, you are in at the deep end, and all you can do is wander around, explore and observe the places of the puzzle fall into place. It's hard to explain the phenomenon of Myst. It is so utterly unlike the style of the Lucas



Art adventure games such as Monkey Island that were so popular when Myst hit the scene that no-one was too sure what to make of it. The graphics are quite simply breathtaking. All you have to go on is the dreamlike scenery around you. You play by moving around and interacting with things you see in the images. If you want to move left, you click on the left edge of the screen, if you want to activate a lever, you click on the lever. There is no fighting and there seems, at least initially, to be very little interaction. Play it for a few minutes and you are likely to think that there isn't very much to the game that a slide show of all the pretty pictures would not provide. Play it for a couple of hours and something happens to change your mind. You become submerged in the world of Myst, intrigued by the strange places you are exploring, and eager

to figure out just what the hell it's all about.

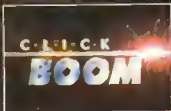
The key to the world of Myst are the books of Atrus. These magical tomes are in some strange way gates to other worlds, and by unlocking the secrets of the pages you can unlock those gates and, eventually, solve the secret of Myst.

Myst is unusual in that part of the game is finding out what the point of the game is. At first you are lost on the mysterious island with little notion of where you are and what you are doing there. There is a feeling that you have entered a dream, the landscape like something out of *Delia's Dr. Seuss*. The game is filled with strange gothic buildings and bizarre machinery, part Heath Robinson and part William Morris. Art deco ironwork curves gracefully across the screen, while snippets of 1920s streamline modern design wait to take you to who knows where. As

◀ There is a selection of some of the 2500 beautifully rendered screens that make up Myst, using renderers of the island from hundreds of viewpoints. Myst allows you to explore the whole game.



▲ I wouldn't fancy hearing that corgi! The attention to detail is what makes Myst stand out - and attention to detail is what the genre is all about. Look carefully, or you're bound to miss something!



you play it all slowly starts to make sense. It seems as if you are following in the footsteps of Atrus, finding traces of his passing and following in his earlier discoveries. Slowly but surely, the world of Myst draws you in, and it can be very hard to leave.

Myst is very much a game of observation. There are clues all over the place, hidden amongst the 2500 beautifully rendered images. If you are not careful, you are sure to miss some. The three tips everyone should know when playing Myst are take notes, play with a friend (four eyes are better than two) and, for the really dark scenes, turn up the brightness of the monitors. Myst is a very cerebral game. You don't fight in it, you don't die in it. You hit dead ends, but there is always a way out, if only you can find it.

### AmiMyst

The history of the Amiga version of Myst is a somewhat convoluted one. It started a year or so ago when a purported demo of the



Amiga version appeared on the Amernet. Although this turned out to be a clever fake, the interest it spawned was enough that the original programming team Cyan got wind and became interested in the notion. Publishers Sunsoft, who had released versions for a number of CD consoles, had not considered the Amiga up until then because of the relative scarcity of CD-ROM drives amongst Amiga users. Now that CD-ROM drives are so common, it makes a lot of sense. After months of negotiation, ClickBOOM, previously known for the top Amiga beat 'em up Capital Pursuement, procured the license. Ever since they announced the license in March of this year, the Amiga community has been split between those who can't wait and those who aren't sure what the fuss is all about. Well, the waiting is

almost over, and from what we have seen it looks like it has been worth it. The Amiga version is not just a direct conversion of the original with everything in place, it is actually better.

When the game was originally released, it used a 256 colour palette. This palette was fixed for each island, limiting the amount of different colours available for each scene. In comparison, the Amiga version uses a different palette for each screen. By using a flick screen for the monitors, they retain all but the two or three colours used by the mouse pointer for the picture display. The core of the original Myst was the Quicktime animation format. For the Amiga version, ClickBOOM have developed their own custom Quicktime player which handles features such as 24-bit output on Cybergraphix dis-



plays, simultaneous animations, 3D sound playback and transparent colours, which allow the animations to play smoothly integrated with the backdrops. It also intelligently skips frames on lower horsepowerd machines so that the game does not slow down and everything stays in sync with the sound even on a 68020 Amiga.

Myst will run happily on most gamers' machines. The requirement of CD-ROM drive and 5Mb RAM is pretty universal, and most gamers have an '030 processor, which is lucky as Myst looks a bit jerky on a bog-standard machine. Given an '030 and AGA, the game runs well, but you'll still notice the animations skipping a little. A graphics card or a step up in processor power is necessary to see Myst at its best, and you'll probably need both to view the full screen into animation

smoothly, but that is no great loss.

### And the future...

One of the best things about Myst reaching the Amiga is that it helps put the platform on a more serious footing for games. If Myst succeeds, then we can expect to see a lot more top titles heading our way. ClickBOOM have done an impressive job on Myst, and if you want more evidence of this then pop onto the Sunsoft web site.

Sales of Amiga Myst will also be a major factor in the destiny of Amiga gaming. With any luck, they should be healthy enough to encourage other such smooth developments, not only from ClickBOOM (who are already have some more surprises up their sleeves). Our guess is that it will mark the start of a new dawn for Amiga gaming. A



◀ **Times:** Myst 2. A picture of the forthcoming follow-up to Myst. According to the Sunsoft website, as well as versions for Mac, PC, Playstation etc, they are considering the possibility of an Amiga version...

rebirth if you like, led by the new school of Amiga developers keen to impress.

We live in interesting times. This month we have seen two conversions of big name titles come into the office, but oddly they represent different ends of a spectrum. One is a stray remnant of the days when everything got released on the Amiga as a matter of course (Champ Manager 2), the other marks the re-emergence of the Amiga as a game platform. We've been hearing a lot about this in the last few months and now it's starting to happen. With Myst, ClickBOOM have a very high profile entry into the Amiga games market. At a make or break time such as this it is reassuring to see solid, well respected titles, and even more so when we see them up and running and looking very good. There are still a few weeks to go before Myst hits the shops, but the final game should be ready for review next month. Be ready for a truly mysterious adventure. ■

**Andrew Korn**

# Championship Manager 2

■ Price: £29.95 ■ Publisher: Eidos Interactive ☎ 0181 636 3000

You see it advertised at football grounds around the world and, at last, you can play it on your Amiga. If you have a lot of time, that is...



**W**hen the annals of computer game history are written and the lists of long delayed games are drawn up, the Amiga version of Championship Manager 2 will be way up there with the likes of Jet Set Willy and TFX. At least two years late. With all that development time this has got to be pretty good, right?

This was always going to be a challenge. The PC version requires a Pentium to run at decent speeds and comes on CD-ROM. Even the saved games eat up an absurd 22 Mb of hard drive. How could this be made to run on an Amiga? The original code was horrendously unoptimised. Compared to Champ Man 1, it doesn't do enough more to justify the system overheads. Extract the core algorithms, redo the code in a nice compact, efficient Amiga sort of way, re-code the database structure and yippee.

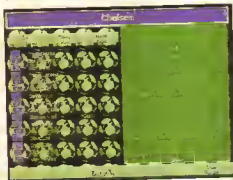
Sure, it'd require a little extra RAM and would crawl as little on a vanilla A1200, but most of us have extra RAM and CPU power these days. Not everyone has a CD-ROM drive yet, but if you skipped all the extras, it could fit on a few floppies and install on your hard drive. Sorted? If only.

## The Ref's blind!

Hard drives apparently aren't common on Amigas. As for accelerators and extra RAM,



► Right, Gianfranco Zola. They don't get much better than this! Below: That tactics screen is as close to the action as you can get without a CD-ROM.



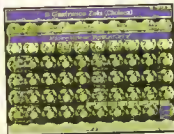
the tiny minority of users who have these add-ons are surely not worth the effort. As for CD-ROMs, the CD32 died out years ago, didn't it? The gospel according to Eidos.

The result is that they asked coding house Sterling Software to write it for the most basic machines going. Ok, so it is quite nice that it will run for pretty much everyone. If the price is that it runs like a dog even on the most souped up Amiga, it isn't worth it. Therein lies the rub. Yes, it is CM2, and yes, it has almost all the features

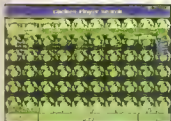
the PC version has and one or two it doesn't, but it runs far too slowly. For those of you familiar with the PC incarnation, cast your eyes to the PC vs Amiga box which explains the differences. If you are not, then here is the run down.

CM2 is a football management game in the classic mould. You can take charge of any football club in the land. You have to cope with the bottom line of all football clubs—success, on the pitch and in bank. You need to whip your squad of wastrels into fighting shape for the season ahead, selling the dud and buying in the stars as you go. The world goes on around you, with the four leagues, the Coca Cola cup, the FA cup and all those intrepid international players come back mired from all played out. Just about the only thing missing is the Auto Windshields cup, which none but a Shrewsbury Town fan would miss.

The principles are the same as every football management game since Kevin Tomlin. Each player has statistics which specify the level of various abilities, from shooting to







▲ Ball's throwing in the old early cross. Little do Forest know what is about to hit them... check the bottom of the page for a ball time score to make Randy proud.

posed to fair. Theoretically the purpose of the stats are to allow you to get the right combination of players, but in practice they are just as important to inspiring reasoned debate along the "10 shooting for Berger? He should be at least 18! Are these people \$%@'ing insane?" lines. Once your eleven players are selected, you just do your tactics and off you go to glory or defeat.

## Over the moon

The implementation of each of these elements is what normally makes or breaks a roster management game, and in CM2 the implementation is excellent. The player data is if anything a little too complete, it can take a while before you have a sense of the strengths of your players. On the other hand this means that it is very in depth, and should give stat fans a real treat.

The tactics screen is a model of how it should be done with custom formations easily set up by dragging players to where on the pitch you want them and dragging bars to where you want them to run.

The player database has an excellent range of search facilities which allow you to hunt through the very sizeable lists of home countries and overseas players in any way you like. Want to search for all players called Baggio? No problem. Looking for a 5-18 year old European left sided attacker allied at less than 500k with a speed of greater than 15 and a flair of between 12 and 16 who are interested in a move? Just seed the combinations and the search will be done in moments. This is the feature that CM1 most obviously lacked and CM2 does it brilliantly. The database contains some 3400 players, not only most of the

league players in England but also leads off big name players from Scotland, Ireland, Wales (?) and abroad. Unfortunately the database is outdated, about right for the end of last season but don't expect to see Paolo DiCanio at Sheffield Wednesday.

Once the game is at hand, you will get to find out whether all that hard team picking and tactical tinkering will work. The game runs well, with a reasonable indication of what is actually taking place. There are a couple of flaws in the routines, which means that the text concentrates heavily on cycles of promising balls in, followed by defensive clearances. There are also the rather 5 corners. If you think a player crossing the ball in for himself was spectacular you should see the headed corners, they're really special. A minor point, as there is enough in the game to keep you on the edge of your seat, and when the game ends you are presented with enough stats to keep the worst football fan happy.

## Sick as a Parrot

So where has it all gone wrong? Speed. When I said that this was a slow monkey, I didn't really drive the point home. It is slow with a capital S L-O-W. It could be overtaken by a stuffed tortoise and would sail dust in a race with a concrete breezeblock. Calculating all the actions of all the other teams takes an absurd amount of time. Fine, up your game and you'll be going a good hour and a half before you get to see your team in action.

It's not just the between game calculations which suffer. The game is full of odd little slow downs. It takes a fraction of a second to click on one of the names on your team sheet to examine their stats, but return to the team page and expect to wait as it thinks hard about nothing relevant.

On the player search screen click on a button to change a single word of text and it redraws the entire screen.

The problem here is that the original code was too bloated. PCs generally have silly specs and this means programmers can get away with writing code 10 times less efficient than it could be. Actually Sterling have done an good job in certain areas. The database searches take about as long on a 14MHz '020 as they take on a 100MHz Pentium, and they've implemented virtual memory paged from the floppy drive to bolster the minimal 2Mb of the Amiga.

When we get wind of all this, we strongly recommended Edos do something about the serious lack of support for modern spec Amigas. There has been some work on the game since, so that it now takes advantage of extra memory if you have it, but really the game needs to be tweaked and recompiled in an Amiga friendly way. In its current state the game doesn't significantly speed up with acceleration, but with recompiling, it

## PC vs Amiga

There are a number of differences between the two versions, mostly changes to reduce memory usage, but some tweaks make the Amiga version a little nicer.

Apart from the changes mentioned elsewhere in the text, other changes worth knowing about are:

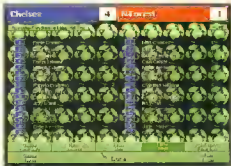
No full Scottish league, no managing international sides. Player histories are less complete, as have all the backdrops. You can no longer access the top player lists although the player search screen can simulate this. Players can be bought immediately rather than having to wait for negotiations to take place in subsequent weeks. Right mouse click selects "done" wherever the mouse is on the page, making navigation easier.

would actually run at Pentium like speeds on an old cheapo 68030.

What is more, it could be hard drive based. Sterling software indicated that if there's sufficient interest, they'll consider selling a patch disk which will correct all this but both Edos and Sterling would have to be persuaded that it is worthwhile first. Check the info pages at the start of the game for more details.

It is an excellent game but unfortunately it was never going to work on a basic Amiga without a full rewrite of the code, which Edos did not seem to want to do. Despite this it was written without taking advantage of the hardware most Amiga gamers have these days, turning a great game into one which is almost unplayable.

Andrew Korn



## CHAMPIONSHIP MANAGER 2

Highscore version	...	...
Verder of disks	...	...
RAM	...	...
Hard disk available	...	...

VERBODEN

If it used modern spec Amiga would score 100%.

70%





# Cannon Fodder



■ Price: £9.99 ■ Publisher: Guildhall Leisure ☎ 01302 890000

**W**hen the history of the real time strategy game is written Cannon Fodder will have a rather unique position. In evolutionary terms, it is like the kangaroo – perfectly formed for the specific circumstances under which it flourishes – and when it is down to the bottom line, bloody absurd.

Playing the game is all about shooting soldiers and bombing huts. You lead up to four soldiers on missions which mostly amount to killing things. The mission screens are nicely drawn scrolling backdrops of desert, snow jungle, moor and finally an underground base. Bad

guys wander around shooting at you, occasionally with rocket launchers or helicopters, while you attempt to wipe them out and destroy all the barrack buildings which generate soldiers with grenades and bazookas. The game is spread up by an assortment of vehicles which you can drive, and the occasional piece of ingenious idiocy such as exploding sheep.

War we are assured, has never been so much fun. You can tell by the Python-esque presentation and absurd theme tune.

Black humour is definitely in order here with a lot of cartoony Sensi style mini sprites lying around pumping blood from their dying bodies. As you progress, you gain recruits to replace those lost to the rigours of war, and are reminded graphically of those fallen sprites by the cemetery in the background with its increasing count of white crosses.

Cannon Fodder falls somewhere between Syndicate and Dune 2. It has Syndicate's small units and arcade speed gameplay, but a more Dune 2/Command and Conquer style overhead view and control fluidity.

Cannon Fodder hasn't got the tactical depth of Dune 2. There's no construction,

► Sen, AJ, Utek and CJ get ready for the next mission while a few of your recruits await their chance for glory.

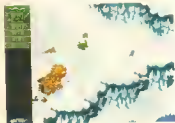


the only development being that soldiers who survive a few missions shoot further. There isn't the satisfying destructiveness of Syndicate either. What there is makes up for it though.

To this day it remains a lot of fun to play. At a winner for floppy or CD version, it's a bit of a bargain too. Right, now stop that you men, that's not sensible at all. ■

Andrew Korn

Graphics 85%	Sound 80%	Usability 90%	Playability 85%
Value for money	...	...	...
Number of disks	...	...	...
RAM	...	...	...
Hard disk installable	...	...	...
90%			



# Cannon Fodder 2

■ Price: £9.99 ■ Publisher: Guildhall Leisure ☎ 01302 890000

**W**hen this follow up to Cannon Fodder first came out, response was lukewarm. People thought that it was a bit of a cash in, and truth be told it doesn't exactly revolutionise the formula. On the other hand, re-released for little more than the cost of a pack of fags and two cans of low grade gutrot special export, Cannon Fodder 2 is closer to the cheap entertainment stakes.

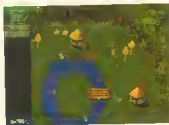
The scenario has changed a little from CF1, even if the gameplay hasn't. The mini sprite army has quit their employment in her majesty's armed forces to become mercenaries and

fight in a war on an alien planet. Their new employers need to test them so they logically enough, hurl them through the time zones in search of a decent challenge. Hence the battlegrounds you fight in here are rather more eclectic than the original – taking in desert warfare, Chicago gangsterland, space ships and the dark ages before your arrival in the final alien warzone.

There is certainly more variety in the graphics than the original, and the opportunities for humour are well taken, but there is unfortunately a concomitant loss of clarity. This is particularly noticeable in some of the latter stages where garish alien colour schemes can make you play a little tricky.

If the colour schemes don't make you tear out your hair, the levels most likely will. CF2 has a steeper learning curve than CF1, with a couple of easy missions at the start to lull you into a false sense of security before the trickiness zooms exponentially. If you haven't got the hang of the game principle prior to this then you may never pick the

◀ There's plenty of choice. Desert buildings and alien hanes with Italian restaurant wallpaper to their floors.

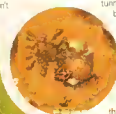


game up again, so unless you're a game nut, you're better off picking up CF1 first.

At this low price, CF2 has a lot to recommend it. If you liked CF1 then there's no question that you should buy this. For all the minor niggles, it's still Cannon Fodder, has 72 more levels to challenge you and a lot more laughs than a day in Milton Keynes. ■

Andrew Korn

Graphics 85%	Sound 80%	Usability 90%	Playability 85%
Value for money	...	...	...
Number of disks	...	...	...
RAM	...	...	...
Hard disk installable	...	...	...
88%			



# SPECIAL RESERVE NEW CLUB SHOP

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Free too to come along for a fun day out for all the family

## A500 Software

MANUAL DATA PREPARED

1. SHARPEVILLE GAMES

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## A1200 DESIGN PACK

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## PLAYSTATION TOP 15

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## N64 TOP 15

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# SADNESS

Coming Soon from Sadness  
Software, the ultimate Amiga  
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## FOUNDATION

The Ultimate Amiga Strategy Wargame!

Due for release in November 1997, *Foundation* will set new standards for the Real-Time strategy war/conquest games! Featuring many unique features not seen in any games for any platform!

Outclassing the very best elements of *The Settlers 2*, *Warcraft 2*, *Command and Conquer*, *Megalomania* along with some totally original ideas and features - *Foundation* will set new standards for strategy games on all computers.

### Brief Feature List:

- ECS, AGA and CyberGFX fully supported.
- 1 player versus 1, 2 or 3 computer controlled players.
- Over 800 frames rendered intro
- Full control over every friendly unit
- Random level generator for infinite levels!
- Custom made 24bit quality mission/menu screens.
- Advanced enemy Artificial Intelligence.
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- Comes with a Map/Mission editor.
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- Mug-Shots included from Amiga owners!
- Advanced Fire/Smoke/Shadow effects.
- High-Res graphics absolutely amazing!

If you would like to be one of the very first owners of this massive new Amiga game, you can fill in the pre-order form below (NOTE: No money will be debited until your order is sent). This will ensure that your copy is dispatched on the very day of release!

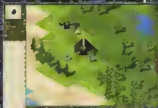
Release Date: November 1997 • £29.95 inc p&p • <http://www.sadness.demon.co.uk/foundation.htm>  
SYSTEM REQUIREMENTS: Any Amiga - 2 Meg RAM minimum Double-speed CDROM AGA and Graphics cards fully supported and enhanced



Incredibly detailed H-Res graphic



Stunning 24bit intro/menu screens!



Full battle and management control!

## ON ESCAPEE

Due for release in October 1997, *onEscapee* will set new standards for Action/adventure games!

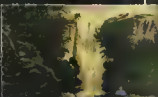
Combining the very best elements of classic games like *Prince of Persia*, *Another World* and *Flashback* along with some totally original ideas and features - *onEscapee* will set new standards for action/adventure games on all computers (PC and Amiga versions under development).

### Brief Feature List:

- AGA resolution and CyberGFX support planned.
- 5 minute 'top' atmospheric 9meg intro!
- 100% multi-tasking system friendly!
- Incredible, atmospheric digital music score!
- Cave, City, Underwater and space levels & more!
- Control choice of Keyboard, Joystick or Joypad.
- A great variety of different enemies - with intelligence.
- 4 years in development by a large team.
- 100% pure assembly language!
- Thousands of hand-drawn animation frames!
- Can be used on Double-scanned screens!
- Complex animations are custom-rendered!
- Logical puzzles
- Full use of Amiga chipset - using 256 colours.
- Rippling water, sweeping light beams etc.
- Amazing film-quality cut-scenes!

If you would like to be one of the very first owners of this massive new Amiga game, you can fill in the pre-order form below (NOTE: No money will be debited until your order is sent). This will ensure that your order is dispatched on the very day of release!

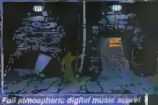
Release Date: October 1997 • £29.95 inc p&p • <http://www.sadness.demon.co.uk/foundation.htm>  
SYSTEM REQUIREMENTS: Any Amiga - 4 Meg RAM minimum. Double-speed CDROM or better. Graphics card support planned for the future.



Full 256 colour AGA graphics



300+ frames of character animation!



Full atmospheric digital music score!

IF YOU WOULD LIKE TO PLACE AN ORDER FOR EITHER GAME OR RECEIVE MORE INFO ABOUT THEM - PLEASE TICK THE CORRECT BOX, AND FILL IN YOUR DETAILS. Please send completed form (telephone/email us) to: Sadness Software - 13 Russell Terrace - Mundesley - Norfolk - NR11 8LJ - UK Tel: (01263) 722189

Place a Pre-Order for FOUNDATION ☐ Receive further info about FOUNDATION ☐ Place a Pre-Order for onEscapee ☐ Receive further info about onEscapee ☐

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# Blade

■ Price: £14.99 ■ Publisher: Alive Media Soft © 01623 467579

**New software company Alive Media kick off with a budget RPG called Blade. Get ready for a dungeon bash that goes on for ever...**

**S**tep on your broadsword, it's your job to plunge into the dungeons below to defeat the hordes of evil before they overtake the land. I'll bet you've heard that one before.

Turn the lights down low and be very, very quiet. We're hunting monsters. Preferably of the big and slimy variety, because those are the sort who require that you and not some other slouch defeat them. The kind that earn you gold, experience, and ultimately the respect and admiration of all of the little people whose meagre existences you've saved by your actions.

Of course, you don't have to get your hands dirty. Technology has evolved so far that you don't have to even pick up the joystick. Touch the keyboard, you can do all this work with just a mouse.

## Blade unsheathed

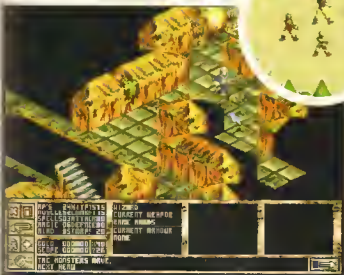
You had to peg it in terms of acronyms, Blade would be a CRPG 3D-isometric turn-based game. But you're probably looking for something more informative than that.

To break it down, Blade is a computer role-playing game, meaning it's got its roots in the swords and sorcery paper-and-dice games as well as influence from the past

15+ years of computer RPG development.

These are not a uniform group – there are some CRPGs which focus very heavily on puzzle-solving, being in the right place at the right time with the right password or map. The official SSI AD&D games are a good example. Others are more "hack and slash", with a loose set of goals and puzzles but mostly defined by killing more and more monsters to accumulate power. The Ultima series exhibits this tendency. Blade is rather more influenced by the latter group.

3D-isometric means, well, what it says, really. Most of us know the type, it's been done quite a lot on games dating all the way back to the Spectrum. The view is angled from above, not first person. And in being turn-based, action is carried out in sequence, person to person, and each character has a certain amount of "action points" which are spent moving, turning, fighting, casting spells, and so on. In point of fact the whole interface bears more than a passing resemblance to UFO. Enemy Unknown, although it's got far fewer things for you to worry about – the interface is very, very simple. Blade will cater to a wide variety of system con-



▲ It takes a while, but then they are at the shop at last. Anyways got 5hp for a broadsword? Miss's quest early

figurations – best experienced on an O30 or better AGA machine with hard drive. Still playable (just) from floppy on a base 1 meg A500.

Exploring the structure and the world of Blade is a series of pleasantly surprising simplicity when it is most appreciated (like in the interface) and head-shaking disbelief at a grossly overcomplicated issue – but more on that later.

## Forming the party

It's about more than getting the bear and pretzels together. Many, but not all CRPGs are based around a small group of adventurers rather than the lone quester. In Blade, you form a party of 4 characters from a pool of seven. These are, in no particular order, the Warrior, the Empath, the Elf, the Dwarf, the Wizard, the Cleric, and the Thief. Unlike most CRPGs, however, you don't get any say whatsoever in what these characters are

## ...and the hack

Blade is the brainchild of one Mark Sheeky, who according to the game credits was responsible for each element of the game's creation. It makes an interesting test case for those of us who feel that often the best games of all time came from a single hand. Blade will not quite be remembered with such games. Part of doing that well is recognizing your limits, and Mr Sheeky's 3D modeling skills (used for various art in detail and intro shots) leave something to be desired. The gameplay could have used some bolstering to give it a bit more "fullness", perhaps from a collaborator. The music, and what there is of sound effects, are however quite good.

like – there are no stats to randomly generate or pick, no kit color to set you can't even name them.

That's not such a horrible thing, actually, since that can often be tedious and off-putting to casual gamers. People with paper RPG experience usually don't mind the task of character creation, but those with shorter attention spans don't always want to take 30-90 minutes just to get ready to play a game. In this, Blade has made one of those positive time-saving innovations I told you about.

The seven characters each have distinguishing features. The most bland is the Warrior – he can fight and that's about it, although he does fight rather well. Wizards Clerics, and Elves have spell powers (in declining order of power) and Elves gain some other abilities as well. The one interesting character type (in that it wasn't lifted straight out of Dungeons and Dragons) is the Empath, who can sense life around her – good for finding baddies or evading them.

Building the party of four involves trading off the abilities of the characters against one another – you can go into the dungeon with an Empath Elf Cleric, and Wizard and be quite a magical powerhouse, but who's going to watch their back? Forget to bring a thief and that locked door is a much bigger problem. You begin to see the issues at stake.

Now, since Blade went and saved you all that time saving you from a long drawn out character generation, you'd think it would drop you outside the dungeon door ready to go, right? Wrong. You're actually dropped off on a rather deserted looking road in a town,



where a number of small shops stand ready to provision you for your journey to the depths. This is ok, but remember that turn based system I told you about? Well, you have to move each character individually and it will take you several turns to reach a store.

And if you split up, you'll have to get everybody back together sooner or later. This isn't so terrible in and of itself since the game moves pretty responsively to your commands. But there are some really unnecessarily annoying issues here.

The shops are spread apart, and while your characters come with an initial endowment of gold, there's more gold scattered around the town that you should pick up so you can afford some of the better items and so a Wizard can buy a spellbook quicker. There is an upside to going after this gold that's been laid out in plain sight – it lets you get used to the game engine without a gobblem breathing down your neck. But the downside is that it takes half of forever and really should have been handled in a more efficient manner than sending you all over the place doing tedious tasks. This is one of those incomprehensible complications that make Blade a chore at times.

## The slashing

Except for the shopkeepers and monks in

the temple, there is no signs of life anywhere on the surface. (A few randomly moving people would

have broken the monotony nicely, but no such luck.)

Once you enter the Dun-

geon, though, trouble will

come looking for you pretty

quickly. You see a monster,

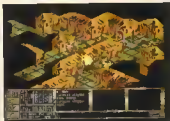
tell you. At the outset they're

just weak monsters – but you're

relatively weak heroes too. You'll

went to whomp some monsters collect some treasure and experience, retire to the surface to cash in and heal up, head back in and so on. The challenge gets steeper as you get more powerful, of course.

In case you were worried or concerned about it by now, the game does have a plot we alluded to at the beginning. The evil Gool was so evil that instead of just killing him



▲ General's rookery monsters looking pretty confused by a wizard and his amazing invisible disappearing tricks.

(which never works on these really evil guys) he was imprisoned in a Plot Device.

And when an earthquake broke open the Plot Device, Gool re-emerged and brought havoc and mayhem upon the land. Being the only four starting heroes with a free afternoon, you get pressed into service. Pretty standard stuff for the aforementioned monster-whomping.

Blade's interface really does work pretty well once you're in the dungeons. The map is revealed to you as you go by line of sight, and you can deploy your troops in an effective manner to put monsters out of your misery. Not everything is immediately obvious on sight, so by right-clicking on objects you can get a short description. Combat progresses much like any other turn-based game, but the monsters will be coming after you and inflicting damage while you wait to get your action points back. It's just a shame that once you leave the dungeon you lose your will to live.

The great balancer against quality is price. As a budget release, Blade represents pretty good entertainment value. It will win few enemies, but is not likely to start a cult or be the source of spirited debate. Being available for so many configurations, in both ECS and AGA graphics modes, it balances accessibility and technology fairly well.

If you give it the chance – more to the point, if it gets the chance – Blade really can suck you in. There's a lot of fun to monster-whomping and the speed of the interface means you won't be waiting all day to get to the punchline. Turn the lights down low and stock up for the long haul, because Blade's the sort of epic game that, if it grabs you, can move the clock from 6 pm to 6 am very, very quickly. ■

Jason Compton

## BLADE

Workbench version...	2+	Resolution	768
Number of disks...	4	Sound	80%
RAM...	1MB	Installability	85%
Hard disk installable...	Yes	Playability	75%

OVERALL  
Hack and slash is fun, but can leave you empty.

86%





# TFX Tips



Back once again with some more tips for the game that just gets better the more you play it, Tips Central this month offers some advice on survival, refuelling and frankly, cheating. If you've still got any queries on TFX, send them to 'TFX Q+A' at the usual CU Amiga address.



▲ Mid-air refuelling requires you to 'dock' with a purpose-built refueller plane that patrols the skies at around 30 000 feet – a delicate operation that can go horribly wrong



▲ You can use the virtual cockpit or exterior views to check that your refuelling boom has been extended in anticipation for the rendezvous

## Refueling

There will come a time when the tiger in your tank is exhausted and you run out of fuel. Fortunately for the forgetful, you are warned that your fuel is running low, in which case the time is right to refuel. You have a choice:

- Find a friendly runway and land (where you will also be re-armed)
- Find a KC Tanker (a refuelling aircraft)

Both methods are not easy and require practice, but it should be noted that loads of bonus points are on offer for refuelling in the air. A KC Tanker is always full of fuel and on standby (above the clouds if it's a cloudy day) so fly high. The tanker usually operates at a service level of 30,000 feet and at a speed of around 300 knots. When you're close enough to the KC Tanker and match its speed, it will release a fuel line, otherwise known as a 'boom'.

- Press the Del key to open your aircraft's refuel access

## EF2000 Refuelling

A fuel tube is located at the front right-hand side of the aircraft (you can see it if you use a Virtual or External view). The trick is to fly so that the tube pokes into the end of the boom released from the left-hand feeding station of the KC-10 Twin Boom Tanker. When you manage this, the boom will lock into place and refuelling will automatically occur. The normal fuel feed rate is approximately 300 gallons per minute. The fuel gauge shows the quantity of available fuel.



▲ Once you've hooked up, you can refuel for a while as your tanks are replenished. As you need to approach the refueller at roughly the same speed for a smooth 'dock', it's handy to turn on Timewarp mode, but it should be turned off before this point to avoid final adjustments

## Underhand cheats

Here is a great cheat that lets you skip right through the training section and straight onto the real missions. At the Enrol screen, enter your first name and surname as normal. Once you've typed your nickname, hold down CTRL as you press Return for the third time. You'll advance to the screen where you select a save game slot. Then onto the normal game selection screen. Now however, you'll be able to select Tour of Duty and Flash Points. Easy eh?

If that's not enough, this cheat should see you through the entire game. Whilst flying, hold down the left Shift key and type PLOP. This invokes a cheat mode making your plane invulnerable to missiles. What's more, if you crash into the ground, the current mission will be regarded as accomplished and you'll be moved on to the next. Do the same to turn the cheat off again.



## F-22 and F117a

The pilot of an F-22 or F-117a has an easier time refuelling. The refuel access is at the rear of the aircraft directly behind the cockpit. The KC-135E single Boom tanker will push a probe into the back of your aircraft. All you have to do is sit tight and keep your speed, heading and altitude constant.



## Emergencies

In landing, many things can go wrong. If your aircraft is already damaged, landing may be made much harder, but attempting a crash landing if possible is always preferable to ejecting and losing your aircraft. If you have engine damage, follow this procedure as best you can. You may have a much higher VSI reading and you could damage your gear, but gliding down with both engines out is possible.

Gear damage could prevent you from either retracting or lowering your undercarriage. If you can't lower the undercarriage, land without it. Try to keep the VSI very low, and deploy the brake chute (AltB) if you have one on touchdown, which should bring you to a halt rather more quickly. If things look bad when you hit the ground, eject.

If your wheel brakes are damaged, it will be harder to stop. Deploy the brake chute and air brakes (or, if you look like careening off the end of the runway, deploy your ejection hook (h). Every runway has arrestor cables for emergency landings (not only aircraft carriers! If you can't actually land on the runway, land next to it. You'll then be in for a rough ride, but should have a good chance.



▲ Something has gone badly wrong here, but for a while at least it's still possible to control the plane. An emergency landing should be attempted, but if heading and mechanical failure conspire against you, hit the eject button (Eject) to save your skin.



▲ Oh dear. The General's not going to be happy with you is he? You've gone and rammed into the back of the refueller plane. While the refueller is quite forgiving of back-handed pilots, there is a limit. No gold stars for this mission then.



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# Tips Central



Here we have another set of cheats sent in by you lot, and over on the next page our brand new adventure guru Sjur Matheson all the way from Norway, does some expert adventure solving for us.

## Populous

Here's a tasty little cheat from Eddie Van Dyke of Lincoln

First you start conquest game as usual. Then click on the Game Setup icon. Now select custom custom game and then game options. Click on OK to get rid of the game options window, then click on civil, then 2 players and finally cancel.

If this is done correctly the enemy will be unable to alter the landscape and all of their huts will be mudhills and wigwams.

## Syndicate

We received a totally wacky letter from Chris Lahabib from Croydon with some tips on Syndicate.

In order to pick up cars, trains, even people and enemy agents all you do is drop a weapon, click on it again to pick it up but then quickly click on a foreign icon as the agent bends to pick up the weapon, so it's unsuccessful.

Still on pick-up-weapon mode he/she trundles off and picks up the alien icon (as long as it's stationary). Cars and trains appear as

weapons, and amazingly you can now stroll elsewhere on the map and drop these weapons.

Presto, the vehicle splinks back onto the ground, now shifted but facing the original direction.

You can now drive through walls so long as you don't come to a road and you're in a now shifted car. If you never come to a

road, then your car travels in and out of vision along a single straight line across the screen.



## Rise of the Robots

Here's one that's easier to do than it sounds. According to the manual, it's impossible to get two Electrocorp droids to fight each other, but Kay Are Ulvestad of Norway has found a way to get both players controlling military droids. Concentrate now.

Select the two player game. When the handicap adjustment meter appears, play-er two moves his joystick right. When the

bart goes past the sixth market from the left (counting the border markers which makes nine in all), player one moves his joystick to the left a few times (normally three or four is sufficient), while player two keeps holding his to the right.

The game should now start automatically with both players controlling the military droid. Just make sure the bar is between the sixth and seventh market all the time.



## Road Rash

More excerpts from that letter from Chris Lahabib (who also claims to be suffering from 'time warp fatigue' for some unknown reason), and here he supplies a superb collection of cheats for Road Rash.

First off type in 112233 011H7 or VUKBE 27QAG as your password to get an infinite amount of money and that super-duper top notch bike that you need.

In order to win any race, you need to drive into the rough, all of the way to the right until you come to a stop at the very extreme of the play area.

Keep your control to the right and rev up to top speed. That extreme of the play area has road like qualities so that you can maintain top speed.

Trees and houses will hurtle towards you, but their icons vanish only just before they come into contact with you. The end result is that you jam the joystick to do the 'up-right' manoeuvre while you sit back and get the life spared out of you, eventually winning all the races.

## Civilization

Here's a magnificent little cheat for Civilization sent in from a chap by the rather unusual name of Chaazy in Gimsby. Hope it's not anything to do with the state of his socks!!

When you build your first colony, rename a CHARLOTTE. You'll then see a message stating 'Cheat Mode Active' and find at least 50,000 glittering gold coins in the bank. Also, as a bonus the entire world map is available to view. Get crackin' then!!

## You need help

If you would like some help on any game - or you have some tips that you'd like to share with your fellow readers - then please write to us at Tips Central at the following address, remembering to mark your envelope Adventure or Arcade accordingly:

**Tip Central,**  
CU Amiga Magazine,  
37-39 Millharbour, Isle of Dogs,  
London E14 6TJ.



## Adventure helpline

## Monkey Island 2

I'm stuck on Monkey Island 2, can you tell me how to win the spitting competition? On the easy game, on Inky Island I've got to the X mark, bombed it and went down. I know you've got to make a voodoo doll of LeChuck and I got most of the ingredients but can't get something off the head and also can't open the drawers in the room with the broken down prog machine, is there a way?? Please help?

John Jordan

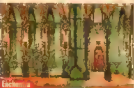
Winning the spitting competition is quite complicated. First you need to get a library card on Phatt's Isle. Then go to the bar on Scabb Isle, use the card as ID, and buy the yellow and blue drink. May you even get a supplementary crazy straw! Mix the two drinks and you are up with a green one.

Now it's time to set sail for Booty Isle and try spitting. Didn't do that well did you? Try looking at, and then moving the flags. You'll need a distraction. Try the horn on sale in the antiqueshop. Try spitting and you'll see a slight improvement. Try again and this time use the crazy straw on the green drink to get thicker spit. Still not good enough?

Try one last time, and this time look at the scarf worn by one of the spectators. Spit only when the wind blows, and you should be champion.

## The Spens Legacy

Dear Helpline,  
I'm stuck on 'The Spens Legacy',  
In the outlaws Caves I am asked



Enchantia



Simon the Sorcerer

by a statue called Gorlock to find a riddle. Where is the riddle?

I can't find it anywhere!! In my inventory there is a sword, shield, bombs, dagger, shatter sword, tinder, strength potion, mallet, screw driver, gloves, gem, shoes, ice hammer and cutters. Is there something I should have picked up earlier? I've obviously missed something but what? Please help me as I've been stuck there for almost a year!

Kerry Bromfield, Llanca

You need to go back to Gilliards Rhine, as you seem to have moved on a bit too quickly. I assume the shoes in your inventory are the hyper boots. Find Rupert and talk to him. Then walk right away from him until he's off screen, turn round and run him down using the hyper boots.

He'll drop a secret pass. Use this to get into the informations building, where you should find a chest containing the book of riddles but with 3 pages missing. To find them, locate some barrels, use the shatter sword to smash them, and presto, the book is complete.

Give it to Gorlock. I would also try playing around with the switch as in the The House of Mystery. Left, right, left, right, sounds like an interesting combination.

## Enchantia

On curse of Enchantia I have given the fish to the eskimo in the ice lands but how do you get out and what do you wish the fishing rod??

Craig Lincense

Firstly you should make your way to the big ice cube, then try fighting the fishing pole. You've now made a fish! Let's just take a moment to add up everything.

You're standing near a big block of ice and have just made a fish. What could possibly happen next? I wonder? ... One 'another creature enjoys it's freedom' faster, and you



Big Red Adventure

should pick up the ashes and walk along the left side of the screen till you meet the Walrus.

Now I don't want to give too much away but you have to get across so, use the Walrus as a bridge, then scream for help. You never know you might just get it.

## Simon the sorcerer

I'm stuck on Simon the sorcerer 1. I can't seem to get the beer barrel in the pub. Please help me.

Also I lined using the matches on the beehive which is meant to work but won't. Please tell me what I'm doing wrong??

Louis Shanahan

These two things are actually connected. You need to use the wax from the beehive on the barrel in order to plug it. Then the barman will think it's empty and carry it outside.

Now, here's how to get hold of the wax. You should head for the castle. Use the clapper you should have found at the blacksmith's, with the bell, and a long piece of hair will fall down. Climb up and into the window, then talk to the girl, and kiss her.

Whoop! Take the rapusar back to the chocolata truffle house and let it have a little taste of the door. Once inside, take the hat and the smokebox. Use the smokebox on the baahiva and there you go. Back where we started, in the bar, ask for a drink to keep the barman occupied while you do your magic stuff.



Monkey Island 2

## Big Red adventure

I'm stuck right at the start of The Big Red adventure. I have left my hotel room and picked up the rope in the foyer, but can't find a way out. It is driving me completely mad! Please help!

Dickie Dimes, Chassington

Well... You probably got up on the wrong side of bed. Go back into your room, try the bed, and get up on the side closest to the toilet this time... only joking, it takes a mastermind to figure this one out so you shouldn't feel embarrassed.

What you do, when in the foyer, (congrats on making it this far by the way), is give your key to the Porter. Then move your cursor to the bottom of the screen to get out. Did you remember the TV-aerial by any chance?

## Police Quest 2

Could you help me with a problem in Police Quest 2. I'm at the motel, I've shown my badge and the mug shot of Bams to the guy at the window, so I know what room he's in but I'm unsure of what to do next.

Stavon Fletcher, Buckinghamshire

Get back to your car and radio in a report. Then you request a warrant and call for backup.

Remember 'Safety First' just like with important files on your hard disk... always make backup!

Well. Enough wisdom.

Get out of the car again and wait. An officer will come along and hand you the warrant. You

down, and ask for the key to the room. Go there and wait for your backup to arrive. Be sure to stand at the right side of the door when you attempt to open it so as to avoid being shot. Now you wouldn't want that, would you?

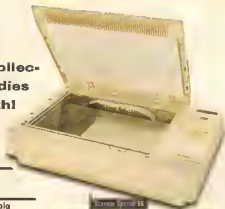




What a monstar collection of Amiga goodies we have this month!

You'll pry my

Amige from cold dead fingers.



## 56 Scanner Special

Larry Hickmott examines three SCSI flatbed scanners. Are the big brands best or will a cheaper unit stump up the goods?

## 61 Imaginex

This software add-on to Imagine falls under John Kennedy's close scrutiny. He asks if it's worth the money

## 62 HiSoft CD-R kit

Plummeting costs of CD recordable disks and CD recordable drives now make write-your-own CDs an affordable reality

## 66 Sharp Minidisc

In a follow up to our coverage of Digital Compact Cassette, Met Bettinson checks out Sharp's latest portable Minidisc player/recorder.

## 69 Viper 520CD

Tony Horgan checks out Power Computing's all-in-one 68020 accelerator and IDE/CD controller for the A500.

## 70 Eyetech 120Mb floppy

A floppy drive that uses 120Mb optical floppy disks as well as 720K/1.44MB PC disks? Met Bettinson asks if it's really true.

## 72 PD Scene

The World of Magic, Splat 2, Hotdog, Tossword, KidSTOP V5.3. Steve Bye reviews the lot

## 74 PD Utilities

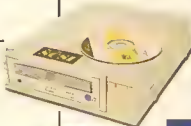
Steve Bye talks through some handy utilities software available to us Amiga users.

## 78 CD-ROM Scene

This month it's a games special which features a whole bunch of CD32 games available from Epic.

## 80 Art Gallery

Andrew Korn strokes his chin and astounds you with his knowledge of art ... whilst talking you through the wonders of Art Gallery



# techscene

# Scanners

Take a look at the new breed of cheap high performance scanners, along with some hot new software as tested by Larry Hickmott.

Once upon a time, the only choice the Amiga owner had when it came to scanning images was to either mortgage the house to buy a flatbed scanner or put up with a hand scanner, a fate worse than owning a PC for many. The only significant advantage the hand scanner ever had over its more illustrious rival was price but now even that edge has been eroded with flatbeds costing as little as a hundred pounds.

On the Amiga however this price advantage is compromised by available scanner drivers. Until recently, scanning software was very thin on the ground but that has recently changed for the better with the arrival of the commercial package ScanQuix 3 (reviewed over the page).

All these changes in the market mean that you can now take any printed image and use it within your own projects, whether that's standard GTP work, 3D rendering, graphic designs, web site creation or whatever. You can scan important documents for archive purposes, use your scanner as a photocopier in conjunction with your desktop printer and export it even further by converting text on paper to text on screen with the help of an OCR (Optical Character Recognition) program. With prices of scanners now lower than ever you don't need much of an excuse to buy one.

## Buying a flatbed scanner

The number of flatbed scanners available to computer users is mind boggling these days. With so many to choose from, the type of flatbed you buy will depend on many factors such as its resolution, available optional extras, price and most importantly, an Amiga software driver.

The first point on your check list should be an Amiga software driver. Without it, your scanner will be useless. As a general rule, scanners supported by commercial packages like ImageFX and ScanQuix should be fine. If however, you must insist on using a scanner not covered by a commercial package, try to get an idea of how good the alternative is before buying the scanner because some non-commercial scanner drivers are barely useable.

Next there's the subject of optional extras like transparency adaptors. These are light boxes which sit on the top of scanners and allow you to scan slides. From what I have seen of these, a dedicated slide scanner is better although I don't see any support for these on the Amiga.

The third point to bear in mind is the resolution of the scanner specified in DPI (dots per inch). Although you may have a 300dpi scanner, you may find your software only allows scanning in lower resolutions. This may also occur if you are

low on memory. However a higher resolution scanner will be an investment for the future even if your current software can't make the best of it.

In most cases, 100 to 300 dpi will be plenty. It's only when you scan line art or make enlargements of small details.

## Scanning requirements

The two main considerations as far as your Amiga is concerned are RAM and hard drive space. For anything but very small scans you'll need a hard drive (preferably with plenty of spare space for your scans is good 100Mb free at least in order to stack up a library) and a minimum of 6Mb of RAM. ScanQuix has the useful option of scanning direct to disk which allows you to grab images far larger than your available RAM capacity. When combined with Image Studio's virtual memory options, you can manipulate them too.

Finally, my overall impression was that most of the 24-bit flatbed scanners reviewed were pretty close in terms of speed and quality, which just left price something which favoured the Hewlett-Packard ScanJet 5P. Cheaper scanners exist but be very careful when purchasing such units because many of these require shareware drivers and the quality of these does vary a great deal. Good Luck!

# Epson GT-5000-SCSI

■ Price: £289.00 ■ Supplier: Epson UK ☎ 0800 220 545



Reliability is the name of the game with Epson and the GT-5000 looks like being no exception to the rule.

This is probably the most popular scanner for Amiga owners and there are many reasons for this. The main one is compatibility. There are quite a few scanner drivers for the 300x300 dpi GT-5000 and it's always been quite good value, although that advantage has receded lately with price drops for many of its closest competitors. Unlike the Epson GT-8500, the 24-bit GT-5000 scanner does not have dual ports so you have to choose either a SCSI or Parallel version of the unit. The SCSI model reviewed here comes with the large Centronics type 50 way connectors. Cables for this are easier to purchase than the more compact so-called SCSI 2 variants which are especially popular in laptop PCs.

The Epson GT-5000 is fairly ordinary to look at, as you can see, its 'footprint' is only slightly larger than the A4 scanning area it offers, and it stands about 7 inches tall with the top down. It only has two buttons, one for power and another to reset the scanner. Everything else is controlled by

software. The amount of control you have over it therefore is determined to a degree by the software you use to drive it. The quality of scans from the GT-5000 was as expected, very good and if I've learned one thing using Epson scanners it is that they have proved to be very reliable over time.

Overall, I liked the Epson GT-5000 SCSI but it does clock in at around £100 dearer than the comparable Hewlett-Packard offering reviewed above. ScanQuix 3 works well with this scanner although you can use it with other software covered on the following pages of this round up. Perhaps build quality will prove to be a plus point in the long term.

**System Requirements:** Workbench 2.91 or later, 5MB of memory, hard drive, mouse necessary and accessories recommended.

### OVERALL

An excellent scanner but over priced for the Amiga market.

90%

# Hewlett-Packard ScanJet 5P SCSI



■ Price: £175.00 ■ Supplier: Hewlett-Packard ☎ 01344 369 369

This was the first time I had used a Hewlett-Packard scanner and having had great success with their printers I had high expectations for this budget priced 24-bit flatbed. The 300x300 dpr ScanJet 5P is about the same size as the Epson GT-5000 and comes with two SCSI-2 ports, so it can be placed within or at the end of a SCSI chain.

Obviously you'll need a SCSI-2 cable to connect it to your Amiga. You'll also have to set the SCSI ID. Unlocking the scanner heads is certainly easier than on the other scanners. What is annoying however is the location of the power switch at the back on the right hand side of the scanner, making turning it on end off a pain if it's sitting amongst other devices (unless you've got long arms).

Driving the scanner for the purpose of the review, I used the ScanJet driver from ScanQuix 3. This wasn't as trouble free as the Epson module. From time to time, I had some tricky moments with the previews on the

Scan to Disk\* utility and a number of corrupt files as well, but what results I did get were certainly among the best. I put the corrupt files down to the hard drive I'm using but users should be aware that this may happen from time to time, so check your files carefully.

In the performance stakes, the time taken to scan images is quicker with the ScanJet although the difference between this and the other two isn't anything to really shout about. Like the Epson GT-5000, I used a Classic Squirrel to attach the ScanJet to the A1200 and used ScanQuix to control it. I did also use the Hewlett-Packard model with ImageFX 2.8, and although not trouble free (nor was ScanQuix) it did a passable job.

If price is your main concern then this is definitely the best of the three looked at here. Even if it's not, it's still the most highly recommended overall. It may not have the extra features of the ViewStation, but it does just as good a job on scanning prints.



▲ Doing an impression of a teardrop, the HP ScanJet is a great union of quality and value

**System Requirements:** Workbench 2.04 or later, 68010 of memory, hard drive. Memory and accelerator recommended.

#### OVERALL

An excellent scanner no matter which way you look at it.

**93%**

# Artec ViewStation

■ Price: £259.00 ■ Supplier: Gastener ☎ 0181 345 6000

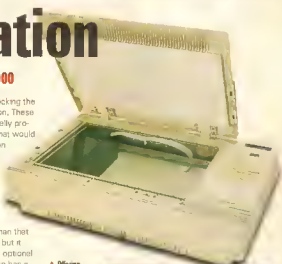
The 300x600 dpr Artec scanner has been around for a while now and if the comments I've had from customers are anything to go by the only drawback with it in the past has been the software it comes supplied with. This doesn't seem to be an issue anymore as it's now supplied with a version of ScanQuix 3 (unfortunately with German manual though).

One of the advantages of the Artec ViewStation over the other scanners on review is that it comes with a Classic Squirrel SCSI interface as an optional extra priced at only £30 if bought with the scanner. The cable supplied however was not correct so make sure the one given to you will allow you to connect everything up without the need for gender changers and so on. Check with your existing gear to find out how it will fit in your system and make a note of what leads and connections will be required before ordering.

To get up and running, I wasn't helped by

the lack of any instructions for unlocking the scan heads, setting the ID and so on. These I'm assured by Gastener, are normally provided. One thing that worried me that would have been helped by documentation was that the scanner light stays on with the Artec, even when its not in use (but turned on).

At the end of the day, I was impressed with the Artec even though it was up against some stiff opposition. It did what it was asked and you can't ask for more than that. It costs more than the others here, but it does come with a connector for an optional transparency scanning unit, and also has a single line LCD status display on the scanner itself. It's a bit bigger than the other two, but not substantially so, and offers increased upper limits of scanning resolution with its 300x600 dpr 'eye'. This is a good option for anyone who is looking to move into more professional projects in the near future.



▲ Offering 300x600 dpi scanning, the ViewStation can create some very crisp reproductions

**System Requirements:** Workbench 2.04 or later, 68010 of memory, hard drive. Memory and accelerator recommended.

#### OVERALL

A first-rate scanner but you do pay more for the extra power

**89%**

# ScanQuix 3

■ Price: £59.95 ■ Supplier: Eyetech ☎ 01642 713 185

**Much more than just a scanner driver, ScanQuix 3 offers seamless scanner import features with your favourite graphics and DTP applications.**

**T**he Amiga has for a long time had to do without a dedicated scanning package that gives us the same features that PC owners have enjoyed for years with their scanner drivers. Not anymore, because ScanQuix 3 lets you use your scanner much more effectively. You can use it on one of two main levels: either as a stand-alone scanning interface or as a device to allow scanning directly into a number of existing graphics and DTP packages. The ScanQuix drivers currently available work with the Hewlett-Packard ScanJet, Epson GT series, Artec and Moustek scanners.

## ScanQuix: basic use

First let's take a look at ScanQuix in its most basic form: scanning an image and saving it to disk. Once a scan has been completed, the image can be saved to disk using various



▲ How about this for a neat trick: Scan images straight into PageStream 3 to cut a problem for ScanQuix 3.



▲ ScanQuix enables you to scan text at high resolution as well as photographs and other stuff. It does not though come with any OCR features.

colour depths such as 8-bit (256 colours) or 24-bit (millions of colours). JPEG saving is supported for 24-bit images, which is handy considering the enormous size of raw 24-bit images of even small dimensions. Some Amiga-specific file saving options would have been nice (such as HAM-8 for example) but any half-decent image processor will be able to convert between a few file types.

The only time scanning got mildly complicated was when I had to set many of the attributes for controlling the scanner. These attributes vary depending on which scanner module is being used at the time and I felt were not that well explained in the printed manual.

## Scanning direct to disk

A full 24-bit scan at 300 dpi of an A4 image is going to generate a truly gigantic file: far bigger than most Amiga users will ever have room for in RAM. For this reason, there's a Scan To Disk option included, which cuts out the need to store the entire scanned image in RAM at once. This has the knock-on effect of allowing quite large images to be worked on by those with small Amigas too, although don't bother trying to do anything too ambitious without at least 6Mb of RAM.

## Now the good bit

We now come to the real high point with ScanQuix: its unique ability to let you scan into a number of applications. These are few in number but nevertheless provide a much needed boost for those of us who do a lot of scanning on the Amiga. The programs supported by ScanQuix 3 are ImageFX, Personal Paint, Photogenics PageStream 3 and Art Department Pro.

The scanning operation in PageStream 3 is dead easy. Once the scanning module has been called from a PageStream menu, ScanQuix 3 appears on the same screen as PageStream 3 and when finished, the image is placed onto your page. It couldn't be simpler and I'm sure I'm going to be using this a lot in future.

The next test was Personal Paint 7 and despite some error requesters on booting the program due to the ScanQuix scanner



▲ ScanQuix 3 is a new package that allows you to scan images using a number of popular scanners including those from Epson, Hewlett-Packard, Artec and Moustek.

driver having trouble with a device on the SCSI chain, once Personal Paint was loaded I was tickled pink to see how well the program went about loading the scanned image via the usual ScanQuix interface which opens up on Workbench.

Scanning into ADPro again proved to be no problem and I also managed to scan an image into ImageFX as well although this unfortunately wasn't without a few difficulties, none of which affected the final image.

## Now it's a photocopy!

The last feature of ScanQuix is the Photocopy program. The aim of it is to let you scan and print in the one action. There are two scanning modes, one for text and another for photos with further choices for the resolution of the scan.

The end result of the copy process was an image better than you'll get on a standard photocopy providing you use a good quality printer with enhancement software. What I don't understand was why the authors have restricted it to black and white. Let's hope we see some colour options soon.

In short, ScanQuix 3 is very good. Not perfect and many areas could be improved but I like it a lot and it's just what we need. With a price of £59.95, it isn't cheap but then it does a great job of getting the most from today's powerful scanners.

## SCANQUIX 3

Developer: Eyetech

### System Requirements:

Workbench 2.04 or higher, 68030/68040 and hard drive

Small sized monitors are simple to use. The configuration

setting can be tricky but need not be used in general.

Business: The interface gets the job done, although there

are a few awkward corners and occasional glitches.

It may seem cheap but for this kind of integration with

such a variety of applications, it's hardly expensive.

Overall

An essential purchase for all

scanner owners

90



# Other Accessories

## ImageFX 2.6

- Price: £179.99
- Supplier: Wizard Dev
- Contact: 0181 303 1800



ScanQuix 3 may be the new kid on the block but there are still a number of other programs that will drive scanners on the Amiga. The one I have been using for years is ImageFX which supports Epson and Hewlett Packard scanners.

Of the two makes, I would say that ImageFX seems to work best with the parallel-based Epson GT series. Using it with SCSI versions of the above scanners has resulted

in mixed results although this may be down to the SCSI controller I'm using (Classic Squirrel).

Of all the packages available, ImageFX certainly has the best scanner interface for previews and because you're scanning into one of the finest image processing packages we have on the Amiga, it's well equipped to let you do what you want with a scanned image.

ImageFX's only drawback is price. At almost £180 it's looked upon as being well over priced for the average Amiga user, which perhaps it is. It is however a professional quality product, priced in that no-man's land between comparable professional software on other platforms and for inferior commercial software and shareware. At the end of the day you can't really quibble about the price as it's in a league of its own. This is just one area in which it shines.



▲ The program with the best interface for scanning is ImageFX 2.6 although it must be said, I did experience a few glitches with SCSI scanners and the application is three times more expensive than either ScanQuix or PowerScan Professional.

**System Requirements:** Workbench 2.04, 68k memory, hard disk. Recommended: 10MB memory, Accelerator & IPL.

**OVERALL**  
Excellent image processing package

**93%**

## Cable capers

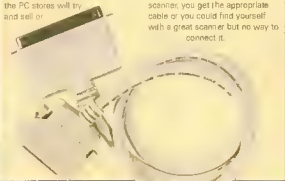
What's the biggest problem connecting a scanner to an Amiga after software drivers? The answer: cables. All three of the scanners I received for review gave me grief when it came to connecting them to an Amiga. They all had different SCSI connections and it took some lateral thinking like using a Zip drive as an intermediate converter to get all the scanners to connect to the Amiga.

If you happen to get a parallel scanner like the parallel version of the Epson GT 5000 the situation isn't any better. Forget the cables the PC stores will try and sell or

give you, they won't work unless you have a special adaptor available from EyeTech. Depending on what software you use, the type of cable will also vary. All are parallel cables, but they are wired up differently.

The variations in parallel cables are ScanQuix, ASDG and GVP. The most popular type of cable is an ASDG wired one which is supported by many packages. That doesn't make it the best but it does make it the most compatible. ImageFX, ScanQuix, PowerScan and AD Pro all support it.

The moral of the story is to make sure that when you buy your scanner, you get the appropriate cable or you could find yourself with a great scanner but no way to connect it.



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MAG  
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By 3.1.1997 for you to download

▲ Everything from large full colour scans to high resolution black and white capers are possible. It direct scanning into applications isn't important, check out PowerScan.

## Powerscan Professional

- Price: £49.95
- Supplier: Power Computing
- Contact: 01234 861 500

Like ImageFX, Powerscan Professional has been around for many years and is a home grown product from well known Amiga supporters Power Computing. Like ScanQuix 3, Powerscan Professional is the type of application that lets you complete the job of scanning an image with a minimum of fuss.

It comes with a well produced manual and certainly has many more image processing functions than ScanQuix 3 but less than ImageFX (not surprising really, as ImageFX is the undisputed king of Amiga image processing). It also

designed around supporting the Epson scanner range and as far as I know, no others. Its strongest advantage is price because of all the scanning applications, Powerscan Professional is the cheapest at £49.95.

My only reservation about the program is that unlike ScanQuix, it doesn't let you scan into applications which is something that I've found very useful. If that's something you can live without, then Powerscan Professional does the job and very well at that. Could do with an interface change though.

**System Requirements:** Workbench 2.04, 68k memory, hard disk.

**OVERALL**  
Getting on a bit but this package will let you

**82%**



# Imaginex

Price: £15 Supplier: GOC Publishing 01482 500597

**Imagine is a way of life for some: could it possibly be improved upon?**

**T**here is no doubt that at times Imagine can be a real pain in the rear view display. It wouldn't be a lie to say that the Detail Editor, where most time is spent 're-adding' objects, can appear overly complicated. Of course, once it all clicks into place it makes perfect sense, but the learning curve is so steep that at times it seems to 'double back on itself'.

Obviously anything which attempts to make Imagine easier to use is therefore very welcome indeed, especially a new product from a UK software house. Imaginex is a new product, designed to improve the Imagine user-interface, and speed up every day functions. To achieve this, Imaginex exploits a little known 'little used' Imagine facility: the ability to define new buttons.

Once you install Imaginex (a painless process involving the single floppy disk) and the Imagine Preferences Editor you'll notice two things: first, the colour scheme is now blue, and second there is an extra batch of buttons at the bottom of the Detail Editor.

Yes, Imaginex will speed up Imagine, but not because of any increase of rendering speed. The time you save will be the time you normally spend puzzling over the various menu options, because all the vital functions are now available at the bottom of the screen. Instead of hunting around for the menu option to create an object, you can now click on the OBJ button.

Click on the ATT button and the object attribute window pops up. The new selected scroll buttons are especially useful, cycling between the objects on screen or in individual

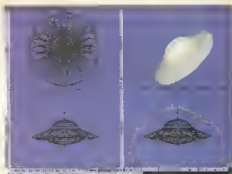
points of faces, depending on which editing mode has been selected. In fact, as you can see from the screenshots, plenty of other commonly used features now have their own buttons. My favourite is the one which means you can now perform a Quickrender with a single click: bliss.

The shade of blue used is pleasant too and has been chosen to reduce the flickering caused when running Imagine in an interlaced screen mode. It's very relaxing on the eyes, but if you don't like it, an ordinary brown/gold colour scheme is provided.

On the minus side, most if not all of the buttons replicate functions which have perfectly good Amiga-key shortcuts. You aren't given the ability to do anything new, only to do what you already do that little bit faster. Imaginex does mean that you can perform almost all functions without touching the keyboard, but it doesn't perform miracles.

## Faster rendering?

Well, almost. As you probably know, Imagine makes use of preset graphics modes. These are the image sizes which you can select



▲ A change in colour, but notice the extra buttons at the bottom of the screen. The Detail Editor has been upgraded!

when you open a rendering subproject from the Project menu. Imaginex has PAL-ified all these from their default NTSC settings (so that a low-resolution screen is 320 by 256 instead of 320 by 200) and also provided some sensible AGA HAMB settings. Two new modes given the nickname 'Pixel Burners' are defined, and these are small enough to render quickly, whilst still being large enough to be visible.

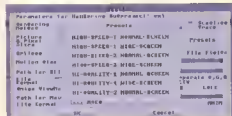
Other preset modes are defined with mikel printers in mind. The settings have been optimised to suit printers operating from 360 to 360 DPI to 1440 by 1440 DPI. To help you plan for these settings, a template is provided for you to load into your scenes. This is in reality a rectangle which won't appear in your final scene, but is useful for accurately composing your scene.

Again, this is something which you couldn't actually do yourself: it's simply that the majority of Imagine users won't have bothered, or even known that the facilities exist. This laziness does result in a lot of wasted time in menu options and larger-than-necessary test renders.

It would be easy to write Imaginex off as unimportant, but after using it for a while it has proved itself very useful on my system, and I'd certainly not delete it. The asking price is fair, and in short, if you do use Imagine a lot you'll find that Imaginex makes things that little bit easier and quicker. ■

John Kennedy

▼ New preset rendering modes make Imagine PAL happy



# Squirrel CD-R



■ Price: £399.95 ■ Developer: HiSoft & Philips ■ Supplier: HiSoft ☎ 01525 718 181

A plug 'n' play CD writer package for the A1200 is long overdue. Now HiSoft have rectified the situation with their Squirrel CD-R.



their own right.

That makes a CD-R drive more attractive than ever. HiSoft have produced a pack for standard A1200s which bundles a Squirrel PCMCIA SCSI interface and an external CD writer

with its own power supply. HiSoft are also the UK dealers for the superb CU Superstar-rated MakeCD software and this is provided in the bundle.

The drawbacks of CD-R in the past were the cost and the time critical nature of recording. The cost has come down and mroeas have been made into recording reliability, the latter accomplished with larger internal buffers. When CD-Rs are 'cutting' a gold disk, they must lead the drive with a continuous flow of data (unlike other storage devices). If the CPU or the SCSI bus is interrupted, the CD-R is in danger of suffering the

dreaded 'buffer overrun' in which the data stream dries up (even if only for a split second). The result is a ruined CD-R disc disfunctionally known in CD-R circles as a 'coaster'.

## The Squirrel

This extremely popular PCMCIA SCSI interface is just the ticket for an A1200. Known to function perfectly with a wide variety of Amiga accelerators and various SCSI devices, the Squirrel is a good general choice to connect a CD-R to the A1200. There's also the Surf Squirrel with much the same SCSI interface but also sporting a high speed serial port for the Net heads.

HiSoft tell us they can supply any combination of Squirrel variants, internal and external CD-Rs and of course the MakeCD software.

## Drive options

HiSoft will either supply a Philips CDD2600 or a Yamaha CDR200T mechanism with their CD-R bundle. Both are roughly the same specification, reading data and raw cdds (CD Digital Audio) at six speed while they write at two speed.

Here at CU Amiga, we're familiar with the CDR200 and its faster brother the CDR400, as we use them to cut our cover CDs. These drives are famous for reliability and a lack of firmware problems. Sadly this is not quite the case with the Philips CDD2600 drive. I've heard numerous reports of firmware problems with this drive. After an extensive test out on a variety of software, it successfully managed to write multi-session, Mode 2 style photo CDs and so on, which is to be expected but a bit of a challenge all the same. However it didn't work in Disk-At-Once mode with Burn II (the bundled MakeCD software doesn't do Disk-At-Once).

This is a little bit of shame as Disk-At-Once makes it possible to master complex audio CDs with track markers and custom lead-ins. The Yamaha drive on the other hand is flawless here.

The Philips also had a bit of a problem reading raw CD audio. Reading cdds off a CD towards the end of a disc (the outside edge) saw the drive lock up, report errors and so on.

The problem went away if I forced MakeCD to read at single speed though.

We've had bad experiences with the former Philips model, the CDD2000 but Philips seem to have ironed out most of the problems. Given a choice I would still prefer the

I bought my first CD writer (a bare SCSI mechanism) for about £800 with every blank disk costing £10. Looking at today's prices it's hard to believe that was only a couple of years ago. These days the cost of blank CDs has fallen to about £2 and lower if you shop around.

At this price, this means CD Recordables (CD-R for short) are easily the cheapest random access mass storage around. Actually writing to a CD-R is a delicate affair: slow and time critical, but at the end of the day you have a 650Mb disc that can be read by standard CD ROM drives. Most CD-R drives can read a lot faster than they write, and so double up as very capable CD-ROM drives in

## HiSoft CDR options

Because of the varying specification Amigas out there, HiSoft are very flexible when it comes to CD-R packages. Here are the main ones.

SquirrelCDR XL - External drive + disk, MakeCD and Surf Squirrel £469.95

SquirrelCDR GT - External drive + disk, MakeCD and no SCSI Interface £399.95

SquirrelCDR I - Internal drive + disk, MakeCD and no SCSI Interface £349.95

Make CD private version with manual £39.99

CD-R media - pack of 10 £22.90

## Applications

All this CD cutting is well and good but what can you really do with it? Here's a few of the most common.

### 1. Backups

Backing up probably won't be the major reason to buy a CD-R but when you've got one, a quid per month to copy the vital parts of your hard drive to CD can't be bad. When things go badly wrong, having your entire system and vital files on a CD makes you feel very good to have a CD-R.

### 2. Library storage.

If you have an application that requires filing of large quantities of files, be they scanned images, sound samples or whatever, CD is ideal. It stores a large amount of data but is very quick to access. One can also use multisection modes to append more data to a CD which has already been recorded to.

### 3. Audio recording.

This is a very nice application of CD-Rs. It's possible to read the raw digital audio from existing CDs into large data files. These can then be burnt onto a new CD-R creating a perfect digital copy. That means you can make your own CDs with your favourite CD tracks which will work just fine in a CD portable for example.

This might have been over the top with high media costs but in recent times this is a very real alternative to other digital audio recording methods. A CD-R is a fraction of the cost of DAT or MiniDisc media although write only once of course.

Yamaha, so it would be a good idea to request it specifically.

HiSoft's external box for either drive can't be faulted with its SCSI ID selector and a reasonably attractive finish, though personally I'm not too keen on the Squirrel sticker.

## The Software: MakeCD

MakeCD has been covered in detail previously in as the premier CD mastering software for the Amiga, used to master CU Amiga's own cover CDs.

MakeCD supports virtually everything there is to support except for Disk-II. Once made if you want to do fancy audio mastering, the expensive Burn II is the only option until Master ISO 2 arrives later in the year. MakeCD supports every flavour of ISO generation you could possibly want.

Whether you want to make a simple CD copy of your hard drive or multiplex ISO 9660 and Rockridge formats, it's up to the job. MakeCD also has the facility to cut 'on the fly'. Instead of building the ISO image onto a hard drive and then cutting from that it can build the ISO image and send it straight to the CD writer thus saving hard drive space.

Unfortunately, to cut on the fly there are a number of factors which affect success. These are the speed of the Amiga, speed of the drive, whether you are reading from a SCSI drive on the same interface and whether there's a lot of small files in the source.

The only safe way is to try first in Test mode but this involves hanging around for as long as it takes to cut a CD to see if it will work for real. In reality, we recommend you don't count on this working, instead making sure you have a large hard drive for storing the temporary ISO images.

Make CD is a fantastic package but it is loaded with switches and settings which can be confusing. Thankfully HiSoft have provided a printed manual rather than the AmigaGuide only form as released on Amnet. MakeCD still isn't perfect however. It's not as efficient as MasterISO and the package states a 68030 as one of the requirements.

With the Philips drive, every time I tried to abort a process, I found the package locked up and I needed to reboot. The MakeCD authors say this is due to the CD-R ignoring a SCSI command which seems to point to a suspected firmware bug.

The MakeCD GUI is also rather large and convoluted. Not a major consideration since when cutting CD-Rs, the Amiga should be left alone to avoid buffer underruns but I would have liked the menu GUI to have vanished at least.

## Conclusion

The Squirrel is the weak link in this set-up, as with all PCMCIA devices it's not the quickest and it also consumes significant CPU time. As a result this impacts on reading from an IDE device which is also a CPU driven interface. No doubt this is why HiSoft don't offer the option of a more expensive 4 speed CD-R deck.

I'm impressed with the fact that the pack does work faultlessly on a standard 68030 equipped A1200. That said, cutting on-the-fly is virtually impossible unless there's not a lot of small files to write. We tried to copy a CD from an IDE CD-ROM to the CD-R with MakeCD's copy function but this also failed with a buffer underrun.

The Squirrel CD-R package works well enough for the majority of applications. If making several changes to a large CD and then recutting is your business then you'd be well advised to consider a faster SCSI interface, perhaps an add-on to a trepod accelerator such as the Blizzard SCSI, then it should be possible to use a 4X CD-R and build on-the-fly.

Most of us won't need this and will welcome the value for money that the Squirrel CD-R package presents. Ask for the Yamaha 200 CD-R mechanism, organise a large hard drive and you won't be disappointed with the HiSoft CD-R bundle. ■

Mat Bettinson



## HI-SOFT CD-R BUNDLE

Developer: HiSoft & Philips

### System Requirements:

A1200 with 68030 accelerator solution and a high hard drive.

Squirrel is plug 'n go but Make CD can be complex.

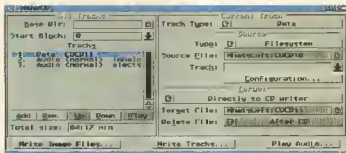
Performance: 82%

Value for money: 83%

The CD-R is a bonus but Make CD is a steal.

OVERALL: Excellent and economical CD writing solution.

91%



▲ Here's Make CD's main GUI short to build one of CU Amiga's cover CDs









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# Viper 520CD

■ Price: £99.95 (8Mb) ■ Supplier: Power Computing ☎ 01234 851500 <http://www.powerc.com>

**Time your old A500 was traded in for a new model? Hang on, there's hope for the old dog yet in the shape of the Viper 520CD.**

**T**en years is a long time in computing and the crusty A500 is certainly showing its age. Anyone who has owned one for that long has had ample time to soup it up with extra RAM, hard drives, OS updates and whatever else, but Power Computing are banking on there still being a portion of A500 owners still using their machines as well supplied by Commodore.

The Viper 520CD makes an admirable stab at giving the old soldier a complete facelift. In one go, it offers all of the following: a 33MHz 68020 CPU, an update to Kickstart 3.0 (with Workbench 3.0 tool), three IDE ports for CD-ROMs and hard drives, a 4 or 8Mb Fast RAM upgrade, plus a socket for a 68882 PGA FPU. The hard drives/CD-ROMs themselves and the FPU are not included in the £99.95 price tag, but everything else is



- 1: General 'glue logic' chip
- 2: Kickstart 3.0 ROMs
- 3: 68020 CPU
- 4: FPU crystal
- 5: 68882 PGA FPU
- 6: Fast RAM
- 7: IDE chip (handles IDE functions)
- 8: 2.5 inch IDE hard drive
- 9: Two additional IDE ports



half decent CPU and a bit of RAM on the side. However this raises the obvious question of whether it's worth beefing up such an old machine in preference to just ditching it in favour of an A1200. If AGA isn't important to you and you don't envisage the need to add much more in the way of additional upgrades (although there's still the side expansion slot) then this is indeed a neat and cost effective solution. For anyone who has found themselves maooned with an outdated computer and insufficient funds to get a shiny new one, this is an opportunity to get with the

program for relatively little outlay. The difference in a stock A500 and one with a 520CD under the bonnet is radical. It turns a virtually useless box into a highly versatile and attractive computer. What more do you want? ■

Tony Horgan

## Squeezing it all in

You're probably wondering where all of this fits into your A500. Believe it or not, it's all housed internally – not in the trapdoor slot, but on top of the motherboard.

It connects to the 68000 CPU socket on the motherboard. All you do is take out the bulky 68000 and put this in its place. It's a bit of a fiddly job but simple enough. There's just enough room inside the A500's case to fit a slimline 2.5 inch IDE hard drive into the card. The remaining two IDE connectors are jacked out through the left hand side of the

case. A narrow slot should be cut in side of the case where the top and bottom parts meet if you want the case to screw back together, although IDE cabling isn't that thick, so you could get away with screwing the case together a little more loosely than usual if you'd rather not heck things about.

The IDE connections offer access to cheap CD-ROM drives as well as hard drives. Adding extra drives to an A500 has never been easier.

## Almost an A1200

Apart from the AGA graphics chip set, the 520CD has almost all you need to turn your A500 into an A1200. Ok, so the AGA chip set is quite a major difference, especially as adding a graphics card isn't an option. Aside from that though, this does give a tired old computer a big kick up the backside, allowing it to run modern applications that require a hard drive, OS 3, a

## VIPER 520CD

Developer: DCER Computer Service

### System Requirements:

Any Amiga 500

Installation is easy enough – just make sure you've got the IDE connectors on the right way round.

No problems here. It works makes great 8500 bytes, gives you access little shadow and lots more besides.

You get within a better low price under £100. 8Mb RAM, a new CPU, IDE ports and a whole 35 upgrade can't be beat.

**OVERALL**  
A great all-in-one upgrade for the ancient A500.

**90%**

## Optional extras

Keeping the drives and FPU as optional extras gives you the chance to configure your setup as you wish. The FPU is a definitely worthwhile addition for anyone into 3D rendering, while the IDE connectors allow you to add various sized hard drives, ZIP drives and CD-ROMs according to your requirements.

# LS120 120Mb Floppy Drive

■ Price: LS120 £119.95 IDEfix £34.95 ■ Developer: 3M ■ Supplier: Eyetech ☎ 01642 713 185

The LS120, also commonly known as the 'A: drive', we've known about for some time but due to a lack of drivers it seemed to be a non starter.

**E**yetech have now sorted out drivers for the LS120 in the new package called EZ-Drive. The latest IDEfix 97 ATAPI package also contains drivers for the LS120. That sorted, what's this LS120 about then?

The LS120 is a floppy drive 'replacement' that reads and writes on 120MB disks in addition to PC MSDOS style 720K DD and 1.44MB HD floppy disks. Sounds good doesn't it? The drive is the exact dimensions of a standard floppy drive and the 120Mb optical disks are physically identical to a standard floppy disk albeit with high tech optical media inside and a snazzy looking 3M case.

## Not floppy

The LS120 does not plug into the floppy interface. It is an IDE device. It works fine with the Amigas IDE interface with the IDEfix software. As standard, the LS120 is mounted as DF4, and the drive formatted perfectly with the Fast File System on the first attempt. It also has an electronic eject rather than a physical mechanism.

There are some problems though. Firstly you can't read Amiga disks. Since it's designed for PC disks only it requires the sync function of PC disk formats. The greatest downfall however was the speed. Much faster than a floppy drive but at 115K/s write and 160K/s read it's nearly 10 times slower than an Omega Zip drive. It takes an eternity to format and fill the disks up.

The access rate is so slow that the slow seek time as well doesn't make a lot of difference so AFS didn't speed things up a great deal.

## Less robust

The media is an equivalent price per Mb to Zip disks but more compact. That said, I wouldn't feel comfortable leaving them around uncovered unlike robust Zip disks.

They need putting back in their case which makes them about the size of a Zip disk again.

The LS120 is superb for reading and writing PC HD disks if you have a real need to do this with CrossDOS. It operates at full speed without the Paula bottleneck making HD floppies such a pain on the Amiga. It's also possible to format disks in the 1.44MB format but with Amiga FFS so gaining a slightly useful HD floppy drive of sorts.

Not really. The LS120 would be gorgeous if only it wasn't so damn slow and if only a lot more people had them. The Zip drive, on the other hand, comes in IDE and SCSI versions. Internal and external is cheaper and a hell of a lot faster. There are also a lot more people who own them to swap media with. So a speed isn't important to you, or you really want the extra space per disk and the ability to read/write PC HD floppy disks then the LS120 could be for you.

It's unlikely anyone would hit in this bracket on the Amiga especially since A1200 users can't replace their floppy drive with it. It'll cost you an extra £35 for the software to use an LS120 or an IDE Zip.

▲ Here's the LS120 drive which will fit in a standard floppy drive bay of a big-box Amiga or a tower set-up

drive although you may have ATAPI software to drive a CD-ROM anyway. IDEfix 97 remains the ultimate ATAPI CD-ROM/IDE driver package and is well worth the money but we recommend you use it with a Zip drive instead. ■

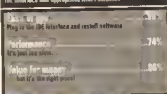
Mark Bettinson

## LS120

Developer: 3M

### System Requirements:

IDE interface and appropriate ATAPI software



**OVERALL**  
Heat little drive hot way too slow.

**83%**





# PD Scene

**Game after game... Steve Bye was happier than someone living downwind of a Prozac factory when we gave him these to review!**

- ★★★★★ Totally blinding
- ★★★★★ Good
- ★★★★★ Average
- ★★★★★ Substandard
- ★★★★★ Oh dear

## The World Of Magic

■ **Type:** Graphic adventure game

■ **Available from:** F1 Software 1 Lower Mill Close, Goldthorpe, Rotherham, S63 9BY. Tel: 01709 888 127

■ **Price:** £4.99 plus 50p P&P

With a serious shortage of commercial adventure games it is left up to the PD sector to feed the ever hungry hordes of adventurers out there, so in that respect TWOM is a welcome sight.

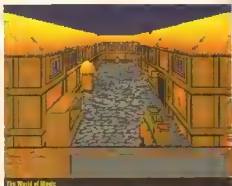
It is a 2 disk adventure game created with GRec (The Graphic Adventure Creator) and the only bad point about a game created with GRec is the non-standard mouse operation, but you soon get used to that. You can install the game to hard drive or boot it from floppy. Once up and running we have the usual point and click panel at the bottom

third of the screen and the play screen above. The graphics, though slightly crude in places, are mainly pleasant and certainly good enough for a game with this price tag. The game takes place in the world of Karamoon, where Dragons, Orcs, Goblins, Werewolves, Kings and evil priests roam. You play a young chap called Grendon, who apparently has a strong desire to become a mage (a magician one presumes?).

By manipulating objects and interacting with characters, of which there are plenty, you must solve your way around the game to its final conclusion.

I must admit that I didn't have time to complete all the game for this review so I cannot comment on the full depth of the game. I did get stuck, but as is usual in this type of game if you have the time to try every possible move in every possible location you will get there sooner or later.

TWOM has plenty of short animations that certainly add to the atmosphere and sound effects and humour are few and far between. TWOM appears to be a fairly well rounded and professionally produced game, which is quite refreshing nowadays. I have attempted a few GRec creations myself and I



The World of Magic

can tell you it is a lot of hard work and the authors should certainly be commended for 'sticking to the task' by producing a nice game, even though I didn't! ★★★★★

## Splat 2

■ **Type:** Game

■ **Available from:** Classic Amiga PD, 11 Deansgate, Redditch, Warwickshire M26 2SH. Tel: 0161 723 1638

■ **Price:** £1 plus 75p P&P per order

Here we have another Arkanoid clone, except it has a bouncing ball with a bat to knock out the bricks and clear the screen.

However, the twist that makes this game worthy of its place among all the other Arkanoid clones is that instead of a bat we have a crab, yes a crab, and you have to hit fish instead of bricks. But don't let that put you off. Splat 2 does offer bonuses in a slightly different way than usual, instead of bonuses dropping from the fish as you knock them out a bonus meter builds up at the top of the screen instead.



You can collect a bonus at any time by pressing the right mouse button. Surprisingly this does make the gameplay slightly different because you find your attention keeps jumping off the bat and ball to the bonus meter in the hope of collecting the best one for the job in hand.

Looking at the graphics I think *Splat 2* must have been aimed at younger players though you wouldn't think so judging by the ridiculously fast default ball speed. The graphics are crisp and clear and the sound effects are adequate. The full version, which costs £6, has 80 levels, but I must admit I couldn't play much past 5 or 6 levels mainly due to the monotony rather than from the difficulty.

More often than I was stuck on a level with just one fish hiding in the top corner of the screen, and with very limited control in directing the ball it took ages to wipe him out, but to be fair this is a common problem with this type of game. *Splat 2* is OK, it looks good and plays fine for a while but it sure won't win any awards. ★★

## Hotdog

■ **Type:** Dog-fight Game compilation

■ **Available from:** Online PD 1, The Cloisters, Halsall Lane, Formby, Liverpool, L37 3PX. Tel: 01704 834 335

■ **Price:** 75p

This disk contains four dog-fight games. First up is the 2 player only Dog-fight V1.0 released in 1990 but surprisingly still good fun to play.

It took me 15 or so attempts just to learn to take off in my cute bi-plane but the ensuing plane crash animations were so amusing I didn't care. Once you are in the air your problems are not over because the slightest false move of the joystick and you are lost, fly too slow or climb too fast and you stall and crash humorously.

Normally a game where each life lasts around 20 seconds would frustrate the hell out of me but this blighter has something that grabs you: maybe it's the attractive graphics or the great animations and sound effects? No, it's just jolly good fun.

The next game in this compilation disk is what for *Dog-fight V1.1* which is now fully AGA compatible with improved graphics and some ground deluges. The third game is *Strike Commander*, much the same as other Dog-fight games except with a mish mash of dodgy graphics, good sound effects but awful gameplay.

Last and very nearly last is *Dog-fight Sim V1.5* which has some of the ugliest graphics I have seen for ages, but it does offer some good features, the main one being the ability to have four simultaneous human players.

Overall this disk is certainly worth the asking price for *Dog-fight* but the others are simply space fillers that you may squeeze five minutes of fun out of if you are really desperate. ★★ ★

## KidSTOP V5.3

■ **Type:** Educational game

■ **Available from:** Aminet/games/misc/KidSTOP Plus for the demo and Brian Koetting 3043-B Oak Green Circle, Ellicott City, Maryland 21043, USA. For the full version.

■ **Price:** \$25 will upgrade the demo version to the full version

This 6.5 meg epic of a game, sorry, 'entertainment system', as the author would have it, is designed for children of all ages, right from toddlers through to say 8 or 10 year olds.

On running the program you are presented with an animated menu, which will certainly grab the attention of most kids. Using the mouse, joystick or keyboard the child simply has to click on an animation, such as the merry-go-round or airport in order to play the activities.

Selecting the airport for example takes you to 1 of 5 scenes. Each scene has hotspots that when clicked on will produce a humorous sound or animation. My five-year-old son enjoyed this activity for quite some time.

At the top right hand corner of each activity screen is a 'page turn' icon so the child can progress through the different screens as will. To quit back to the main menu is just a simple task of clicking on the ever-present school bus icon at the bottom of the screen.

Other activities include a very good matching tiles game, colouring book, Mix and match, a counting game, a musical keyboard, ABC-123 and 'ripple machine' for creating weird colours and



shapes. If you have seen the Dr. Zeus's CD-ROM games for the PC you will feel very at home. KidSTOP as I am sure the inspiration came from there.

The demo version of KidSTOP has 5 of the 12 activities disabled, to unlock the missing games you have to register with the author.

The graphics are just above average for this type of program and do the job well enough. There are stacks of good and clear sound effects and the program couldn't be simpler to use. The acid test for any educational program is whether or not it will keep a child interested for a prolonged period. KidSTOP went and passed this test with flying colours on my kid and that's good enough for me, after all what do adults know about such things? ★★ ★



## Tossword

■ **Type:** Word puzzle game

■ **Available from:** Saddlertemps PD 1. Lower: MBI Close, Goldthorpe, Rotherham S63 9BY. Tel: 01709 888 127

■ **Price:** £10p plus 50p P&P

1 or 2 human players must pit their vocabulary genius against the Amiga with the aim of scoring the most points by creating and placing words with high scoring letters on the board, just like Scrabble.

Tossword has its eccentricities though, for example, any word you place that's not in its dictionary will be accepted but the tiles for that word will not be allowed on the board for that game. Apparently this is to stop cheating, scary stuff huh!

The problem with this is the tiny dictionary. It doesn't recognise simple words 'pound' and 'fete' so it will take a fair amount

of playing to build up a decent dictionary.

However there are options to import and add dictionaries which could solve that problem if you are the way inclined. Tossword comes with three dictionaries, Russian, German and of course English, a lot of fun if you are a linguist! I should think.

But what really struck me as odd, or is it novel? Is that when the Amiga takes its turn on the board it attempts to help you by placing longish words in good positions as opposed to creating words that score high but give you few new opportunities as it would in Scrabble. Interesting. Tossword is fundamentally Scrabble with a few added twists which I think most word puzzle fans will get enjoyment from or even get thoroughly immersed in.

If the screen design, dodgy tile graphics and fiddly controls were improved the game would be even more enjoyable. ★★ ★

**Game  
of the  
Month**

# PD Utilities

Steve Bye tries out some of the more useful examples of public domain software, then gives you his honest opinion on their worth. Read on...

★★★★★ Totally blinding  
★★★★★ Good  
★★★★★ Average  
★★★★★ Substandard  
★★★ Oh dear

## AmiGlobe V0.993

■ **Type:** World Atlas

■ **Available from:** OnLine PD 1 The Cloisters, Helsall Lane, Formby Liverpool L37 3PX Tel. 01704 834 335

■ **Price:** 75p

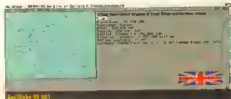
AmiGlobe is a world Atlas for your Amiga

The program boots up with a flat plan map of the world, to find out about a country or a region of a country you just click on it and you can then zoom in or out of the map or click on 'infos' (SIC) for some detailed

information about the country including population, flag, currency, GNP, etc. By clicking on the country flag you are given a textual briefing on the area.

You can view the map of the world in four ways: flat, spherical, perspective and mercator (don't ask!) Clicking on the 'Element' button and then anywhere on the map will give you longitude, latitude, population and the name of the region. AmiGlobe has a few problems here, for example, clicking on Cornwall, UK, gives info for Brest in France.

I know it's only a few miles across the



channel but is that really a good enough excuse? I am also concerned at the accuracy of some of the data, after all this version was made in 1995 so unless you can find an updated version you won't be able to rely on the exchange rates, population figures and anything else that is likely to change.

It's a fascinating program that could be useful, but needs updating. ★★★

## Utility of the Month...

### Cartoon Studio

■ **Type:** Animation Editor

■ **Available from:** 17 Bat 44 Cecil Street, Welford Manchester M28 3LE Tel. 0161 702 6737

■ **Price:** £1 plus 70p P&P

Ok, you've just created a nice animation in DPaint. Hmm, no sound, no fades and not runnable without a player that is where Cartoon Studio can help. Cartoon Studio is an IFF animation editor. Load in your animation and with a few clicks of the mouse

you can easily add IFF sound, samples, fades, set the frame speed, add pauses and loops and finally create a stand alone self running disk for your masterpiece. Cartoon Studio will only accept IFF-Anim5 low-res animations with a maximum of 32 colours, but for most simple cartoon type animations this should be adequate (say's the author).

The example cartoon included is superb and shows what Cartoon Studio can do. Simple, neat and most effective. ★★★★★

### MicroPaint

■ **Type:** Paint program

■ **Available from:** Classic Amiga PD, 11 Deansgate, Radcliffe, Manchester M28 2SH Tel. 0161 723 1638

■ **Price:** £1 plus 75p P&P per order

Even after all these years any new paint program on the Amiga is immediately compared with DPaint, fair or not that's the way it is, simply because DPaint is what most people are familiar with.

So any new program that goes too far against the grain has to live or die on its first impressions and if it is tricky to get to grips with people are just going to junk it. The exception to this rule of course is if the program can offer powerful features not available elsewhere (e.g. Photogenics). What I am getting at is MicroPaint (MP for now) hasn't done itself any favours. As a user I would have junked MP after 10 minutes simply because it alienates you from the word 'go' but as a reviewer I will soldier on and give MP a fair hearing.

Don't get me wrong. I am not implying that all paint programs must be the same as DPaint but it is common sense to build on existing knowledge rather than start again each time. MP has some similarities to DPaint of course but it has gone its own way on a lot of unnecessary things, take the undo feature for example. If an undo is available



on a function you have to re-select the function to undo your last piece of work, surely a simple undo button or keystroke would have been better? Or how about text input?

Yuk you type the text into a requester or a different screen, pointless. On the plus side though MP supports all the usual tools plus up to 256 colours (AGA Amiges) Intellifonts, colour fonts, print pictures, grab screens, supports dailatypes, play animations, has an ARexx port, has a recent file list, clipboard support, macros and some simple image manipulation tools.

I think MP could be a useful extra along side your usual paint package as it has some great features not found in many other similar programs, but I doubt many people could put it to serious use on its own, though I am sure there will be some. In this demo version you can only save in BMP format, you have to register (£15) for the keyfile to unlock the full save function. ★★

## Class HD Utils 23

■ **Type:** Utilities assortment

■ **Available from:** Classic Amiga PD 11 Deansgate, Radcliffe, Manchester M26 2SH Tel 0161 723 1638

■ **Price:** £1 plus 75p P&P per order

This compilation of small utilities contains some old, new and interesting programs.

QuickGrab AGA is an excellent screen grabber, Diskmasher 2 is a ok but slightly buggy, front end for DMS LHA2LZX automatically converts LHA archives to the superior LZX format. System Update 14 could be useful as it compares versions of your system files with the latest version available and updates them if you wish.

HotBot displays a row of icons of your favourite programs on your Workbench so you can launch them easily and quickly. Pro Icon allows you to use Personal Paint 6.3+ as an icon editor, which is nice if you don't like any of the icon editors doing the rounds.

There are also five Workbench backups for WB3 users. How to write AmigaGuide is the star of this disk for me. It is a comprehensive guide on how to write AmigaGuide documents. The author wrote the guide as he was learning him self so it is not totally complete, but there are only a



few oddities left to cover that will not worry most people. It is well written and if you want to learn from scratch I haven't seen a better guide around than this. ★★

## Video Base V2.01

■ **Type:** Database

■ **Available from:** Online PD 1. The Computers, Halsall Lane, Formby Liverpool L37 3PX Tel 01704 834 335

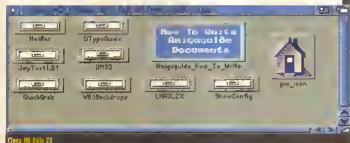
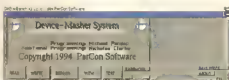
■ **Price:** 75p

This program should be in an Amiga museum somewhere, it's been knocking around the PD scene for yonks. I remember getting it a good looking age years ago and nothing appears to have changed, but as the doc file claims to have been written in 1997 I guess something must have been done to it!

No new features are listed in the docs or indeed apparent in the program. Oh well, I suppose I had better get on with it then. Video Base V2.1 allows you to easily catalogue your Video film collection.

You can add, edit, delete, view, sort, search and print records as well as add a lengthy personal row for each tape. The front end is as ugly as a Tory MP and the program written in Amos 1.3 and not in Amos Pro as suggested by the programmer, isn't compiled.

So if you want to look at some Amos source code or you want to catalogue your video collection and you aren't too fussed about looks, style and features this old timer will do you nicely. ★★



## Best of Aminet

This has been a pretty good month on the Aminet uploads front. If the amount of uploads to the Aminet in any given month is a good indication of the health of the Amiga scene in general, then I can only say that the patient is doing very well indeed! The star upload of recent days has got to be util/wb/NewIcons41.lha (655K) and util/wb/NewIcons41upd.lha (115K), the latest version of the NewIcons icon replacement utility. Rating as some of the best freeware avai, this icon replacement system preserves the palettes of icons separately, avoiding the dreaded palette clash that MegaWB icons suffer from. At CU we rate this as the best icon replacement system going.

On the utilities front there were a fair batch of wand and wonderful things this month. misc/amu/MidiShape.lha (124K) is a bonus for the audiophile Shapashifter, allowing MIDI output from Mac packages via Shapashifter. I wonder what decent MIDI XG software there is for the Mac? On a slightly more unusual side is gfx/edit/write\_it.lha (5K). This is about as simple as programs get, but I love it. It opens a window on the Workbench screen and allows you to doodle in it with the mouse. You can play back the mouse movements quickly or slowly and save your data. I'm not 100% sure what it is actually for, but for an unrepentant doodler such as myself, it saves no end of scraps of paper. The world is full of little Workbench hacks but few are as immediately and obviously useful as util/wb/PowerWB.lha (66K), a simple and apparently fairly clean hack which adds two gadgets to any windows you open, one to show all icons and the other to switch between view by name and view by icon. There are also a bunch of extra keyboard shortcuts patched in. This is one which will make it onto my system.

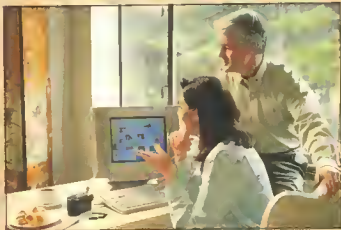
Regular readers of this column know I like the Aminet to keep me amused too, so before I sign off for another month I'd better point you in the direction of pix/trace/WhyYouSoLook.lha, a bizarre but rather excellent montage by Bartosz Madjar.



# Why Apple?

One day we all hope to see the rebirth of the Amiga with a PowerPC processor and other new features to enable it to compete again with today's systems. Sadly though, more than 2 years since Commodore's demise, little of substance has actually happened. We've seen prototypes and heard promises, we all hope to see new Amiga developments.

If you can't wait and need more performance today without paying the earth, there's only one real alternative to consider. There's never been a better time to think Apple!



Only Apple offers you both desktop and portable computers that truly match the ease of use of the Amiga brought to you: desktop. Affordable Apple Macintosh systems have PowerPC RISC processors with thousands of off the shelf programs available in areas where the Amiga was always previously so strong.

And, if you need the most compatible of all computers, Macintosh is currently the only system that can run MacOS, DOS and Windows applications via optional DOS Cards or SoftWindows software.

[illegible]

Other PowerMacs										Portable Macs										Newton Handhelds															
SHOWN BELOW IS JUST A SMALL SELECTION FROM THE VAST RANGE OF APPLE MACINTOSH COMPUTERS WHICH ARE CURRENTLY AVAILABLE										SHOWN BELOW IS JUST A SMALL SELECTION FROM THE HUGE RANGE OF POWERBOOK MACINTOSH COMPUTERS CURRENTLY AVAILABLE										SHOWN BELOW IS JUST A SMALL SELECTION OF NEWTON HANDHELD MESSAGEING PRODUCTS/ACCESSORIES AVAILABLE															
Model	King	CPUs	RAM	HD	FD	Display	Apple	Printer	Other	Connect	Available	Model	King	CPUs	RAM	HD	FD	Display	Apple	Printer	Other	Connect	Available	Model	King	CPUs	RAM	HD	FD	Display	Apple	Printer	Other	Connect	Available
POWERPC	100	8000	16	160	400	12"	1	1	1	1	1	1000	100	8000	16	160	400	12"	1	1	1	1	1	1000	100	8000	16	160	400	12"	1	1	1	1	1
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# CD-ROM Scene

**We're doing a games special this month, rounding up a bunch of new and "nearly new" CD32 games available from Epic Marketing...**

**F** For the princely sum of £2.99 each (plus £1 per title postage and packing) you can purchase any one of these games - plus they'll even throw one in free for every four you buy!

There are a whole load more games than these, so get in contact with them if you want more details. Be warned, not all CD32 games will work on an A1200, but all of these worked fine when we tested them under IDFFix 97 software.

Using CD32 emulation under IDEFix97 software is particularly straightforward. A small utility will prepare a boot floppy for you. Stick the CD-ROM in the CD drive and the boot floppy in the floppy drive and boot up. The game loads as if on a CD32. Great, huh? There is of course one other important issue to take into consideration, which is that many CD32 games use the extra buttons on a CD32 controller.

The easy answer is to buy one of these from Epic, but the CD32 emulation will allow you to emulate the controls through keys. Some games are OK this way, others are a pain to play on the keyboard. Because of this we have rated the importance of a genuine CD32 controller to retaining playability.

## ■ John Barnes European Football

■ **Joypad?**: Necessary

I know someone who once played football with John Barnes in the local park and has ever since worshipped the very ground upon which this ex England, ex Liverpool midfielder legend of dubious dress sense walks.

Perhaps to him there might be some value in this game, a sort of kitsch homage to the hero of his youth. To everyone else, my advice is to steer well clear. Ok, it works, the graphics are no worse than hundreds of other low grade titles, but that is about the best thing that can be said about this cheery monotony.

There is little doubt (despite what the editor may think) about the fact the Sensible Soccer is to this day the King of Football games, so any other title has to have at least something to offer as an alternative to while away the time if you are feeling a little bored of Sensi.

Total Football, Football Glory, Kick Off 2, Dino Dini's goal, these games all had some-

thing worthwhile to offer in their own way something to make you turn to them from time to time.

This on the other hand has nothing. Barnes is currently achieving moderate success reviving his career with Newcastle United. This game should never have been given a revive. **20%**

## ■ Fears

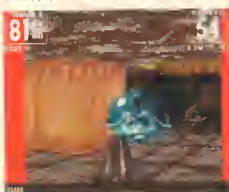
■ **Joypad?**: unnecessary

Fears was one of the first of the Amiga's 'Doom clones'. Released around the same time as Gloom, this one was rather overshadowed by the gorey violence of the latter. Looking at this game now, I can't help but feel we have missed out a little.

The obvious failing of this game when compared to Gloom is that the aliens in this look absurdly cartoony compared to Gloom. It isn't that the Action man figures in Gloom were so utterly brilliant, it's just that the monsters in Fears are too comical to be anywhere near scary.

On the other hand the backgrounds are scary indeed. There are excellent textures and suitably gloomy music. The whole thing trundles along at quite a reasonable rate. This is very definitely one of those games where playing on an accelerator makes a big, big difference. Give it a reasonable CPU and this game flies, full screen.

A 68030/650 is all you need to get the most out of this engine while on a CD32 you had to reduce the screen size to make it remotely playable.



Although this type of game tends to be lumped together under the category of Doom clone, it is more properly a Wolfenstein 3D clone.

You can only look from side to side, it is basically a run through a maze shooting things type of game, and as a blaster it is actually quite good fun. It's very simplistic but also very cheap. Well worth a look if you like giving cartoon octop both barrels. **85%**

## ■ Strip Pot

■ **Joypad?**: Oh stop giggling! No!

This is the notion, You press a button and the reels spin.

It's just like a fruit machine but if you get a line you also get to see a badly digitised photo of a nude or semi nude model. After a while, you see an animation of a semi nude model, apparently.

Even at under £3 this one is a miss. Come on, if you really have to then the top shelf of your local newsagent at least offers better photographic reproduction. Cheap, tasteless and frankly very sad. **2%**

## ■ Legends

■ **Joypad?**: Not necessary

Legends launched itself into obscurity a couple of years ago despite being something of a rarity on the Amiga. Set over four time periods, Legends is an RPG in the Zelda style.



There is a complex storyline, full of characters to talk to and enemies to shoot. Graphically it is polished and reminiscent of the Bitmap Brothers' cartoony style of art.

There is plenty to see and do and a lot of objects to find. The game is humorous at the same time as being involving and men ages to be challenging without being too frustrating. So what went wrong? It didn't get launched at the best time for Amiga games and it certainly offers very little that is new.

The ideas behind the game perhaps outweigh the execution, but for the RPG fan starved of fodder that is a small matter. I'm sure this one that should keep you going a fair while. **85%**

#### ■ Total Carnage

##### ■ Joyped7: Unnecessary

Spare me. Whoever wrote this game was clearly of the opinion that just so long as you drew blocks with big muscles and there are lots of people dying all over the screen you didn't have to bother about minor things such as style, gameplay and so on.

This is one of those top-down-run-around-killing-things games that really took off with that classic of the arcades Gauntlet and went downhill from there. Total Carnage sees you taking on the role of a Ramboesque character, either on your own or in the company of your own little Rambo sidekick to be controlled by some friend, if you can find one willing to waste their time on this.

You are regularly assaulted by hordes of lookalike Schwarzenegger baddies who march blindly into your line of fire and can pick up the odd weapon, key, or diamond



## Game of the Month

#### ■ Guardian

##### ■ Joyped7: Adorable

Guardian was clearly aimed at being defender in 3D, even down to the name.

There aren't little people to defend here, there are buildings to guard instead. It looks more like a flight sim and you don't get the pleasure of waiting at the top of the screen for a lander to get almost far enough to transform into a mutant before you blast him, grab the little guy and deposit him on the ground for a 500 point bonus. Nevertheless, in terms of sheer frenetic gameplay, Guardian has successfully tapped into the Defender ethos.

You are probably all bored to tears with game reviewers going on about how great games were in the old days, but Defender always had that something special. There are very few 15 year old games that you could happily fire up for a quick zap moment after finishing a session of Troped2. Quake or Tomb Raider but Defender is definitely one of them. That

Guardian was likened to Defender when it came out was no surprise, that the comparison still holds up is testament indeed to its gameplay.

The polygonal spacecraft look primitive by today's standards, but the copper list horizons, adrenaline pumping action and beautifully fast screen updates make this a very satisfying gaming experience, and one I am sure I will still have the odd blast at in 10 years time. **90%**



you find lying about.

Every now and again a large tank or whatever appears, but as the firing patterns all appear to be predetermined they are not really a problem, you can just stand at a spot where they don't shoot and finish them off.

In fact the best advantage the enemy have is that because the screen only manages to scroll when it wants to, they can sometimes trap you against the edge of the screen. Total Rubbish more like. **38%**

#### ■ Vital Light

##### ■ Joyped7: Useful

I'm not even going to try to explain the narrative here, it's far too weird. Something to do with a city called Ramon, which is a city of

mystery, marvels and video games.

This is one of those Tetris inspired games that are still being churned out today. It is easy for a title to lose itself amongst the morass of other games attempting to do a Tetris, and in the case of Vital Light that is a pity because it deserves better.

There are, as you would expect, blocks falling. They are in different colours. You have to shoot them to make them the same colour. I am sure you know the basic principle by now. There are plenty of options and two player head-to-head mode.

The setting, graphics and sound are evocatively and distinctively weird, and the gameplay is very smooth. Vital Light is one of the very best of the pseudo Tetris genre and very well worth a look. **88%**



# Art Gallery

Send pictures to: Art Gallery, CU Amiga, 37-39 Millharbour, Isle of Dogs, London E14 9TZ or E-mail them to [artgal@cu-amiga.co.uk](mailto:artgal@cu-amiga.co.uk).

The Surreal Thing, by Mark Ingram



The background is Vista, the painting Photogenic, the modelling Imagine, the inspiration Magritte. The contrast between the 3D rendered figure and the painterly 2D canvases adds a level of irony Rene Magritte just didn't have the technology for.

Flowers, by Lee Martin


 Picture  
of the  
Month


We are more used to seeing Lee do cartoony renders than this moody realist Cineme 4D piece. The strong central composition and high contrast is reminiscent of the modernist photographers. If Western had an Amiga, he'd do renders like this

The One Armed Raver, by Freaky (Phil Price)



A suitably lunatic piece of computer collage. The colours are well selected and the imagery appropriately used. An appropriate nickname: Phil

Hall, by Patrick Moore



Patrick (not the astronomer) uses Imagine 3 for the renders and photogenics to touch up. This reminds me of a dusty museum corridor, redolent of mystery. An excellent sense of place

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From coding tips to desktop publishing, our regular Workshop section continues to instruct you in an expert fashion. Sure to keep you busy for some time.

## 84 Imagine 4.0

The penultimate lesson in the Imagine series John Kennedy shows how to add people to your rendered scenes.

## 88 C Programming

Jason Hulene gives away a few more mouthwatering tips to help you to program with ease

## 92 Surf's Up

Cor blimey, even more Amiga Internet exclusives to feast your eyes on plus the fearful Net God speaks

## 93 Surf of the Month

This month we link up with the Fraaware Round up (page 32) to give you all the associated home pages.

## 94 Wired World

Net bloke Neil Bothwick tells you all about Thor 2.5, the excellent combined mail and newsreader.

## 96 Sound Lab

More wisdom from Thomas Trenn on how to use an image processor to add crazy effects to your audio samples.

## 98 DTP

Up to part 8 now in this ProPage tutorial, and this month Lerry Hickmott tells you how to incorporate DrawStudio Lite with it.

## 104 Q & A

Seeking some much needed assistance on Amiga related topics, here our experts do their utmost to give answers.

## 107 A to Z

From Amiga to Zorro, and quite literally every-flipping-thing in between. This month it's the turn of C...



# Regulars

## 91 Back Issues

Missed an issue of CU Amiga? Shame! Hopefully all is not lost and you can find the offending item right here.

## 108 Backchat

Criticism, comments, general information, suggestions. This is where you can see your name in print.

## 111 Subscriptions

Life is just great when you take out subscription to CU Amiga, the UK's best selling Amiga magazine.

## 112 Points of View

With their soap boxes at the ready, CU Amiga's staff and contributors let it be known what they think of certain issues. Don't miss.

# Amiga Workshop

# Imagine 4.0

**Taking your rendering to the next level involves putting real people into your work. John Kennedy can't find any real people, and so uses himself instead.**

**H**ave you ever wanted to add real people to your rendered scenes? As a spin off from our exploration of brushmaps, we can now develop a technique to add realistic people to your virtual stage, and what's more, we can even animate them.

To start with, we'll need some images to work with. This is where your ingenuity and budget come into play. If you are only dealing with a still image, then a single scanned image will do. However, if you are thinking of creating an animation, then you'll obviously need more than one image.

Grabbing a sequence of stills from video is one option, as is using a digital camera to grab a series of images. Both these require extra hardware I'm afraid, but there is not a great deal we can do about that.

ProGrab from Gordon Harwoods is relatively inexpensive and yet capable of excellent results, and if you advertise in your local paper you are bound to find a VIDI Amiga going cheap. You'll still need a video

source, but most people have a relative they could borrow a video camera from.

In this example, we're making an assumption that the overall outline of the person does not change from frame to frame. This is quite a big assumption to make, but it does simplify everything tremendously. It also works very well for a "talking head" animation.

If you do want to animate a person walking, then you'll need to perform certain steps for each individual frame.

## Step 1

The first step is to make a mask. Using any image, trace around the background details and paint everything in white.

Now paint over the detail inside black. You should end up with a simple, two colour image like this. This will be our mask image. Save it as an IFF image.

## Step 2

Using the mask, we can create an imagine object onto which to map



▲ After the viewpoint, and it's clearly obvious that your "people" are flat and lifeless. It's a neat little effect though.

all the frames of our animation.

In Imagine's Detail Editor there is an option "Convert IFF/ILBM". When you load the mask image using this tool, Imagine will construct an object of the same shape as the black outline.

This process will occasionally cause Imagine to barf, but you can sometimes ignore the errors and still end up with a useable object. Use "Merge" on the object to solidify it a bit, and maybe apply the Smoothing tool to take off any rough edges.

## Step 3

Now we can apply our brush map. Forget about animation for the moment, and select the Attributes of the mask object.

Add a brushmap texture, and select the first image that's in the series of talking heads. This series should be all IFF format images, named as "head 0001", "head 0002" and so on and so forth.

Enter the filename "head" as the first image, and set the Max Sequence value to the number of head images.



## Step 4

Unless you are incredibly lucky, the Imagine object and the brushmap image won't be perfectly matched and you will need to move (and possibly scale) the brushmap to fit.

This is a very tricky process, and it's worth spending time getting it right. Use the Edit Axes button to alter the size and position of the brushmap in relation to the object. You should perform a Quickrender move the map, perform another quickrender and so on.

Eventually you should end up with a match, and when rendered you should see the head image with no background.

## Step 5

Now you can save the object, and use it in the Stage Editor.

Make sure the camera is square on, and you are ready to render. It's probably a good idea to make the head object bright, as this will mean there is no shading.

After all, all the shading we need is included in the original brushmap.

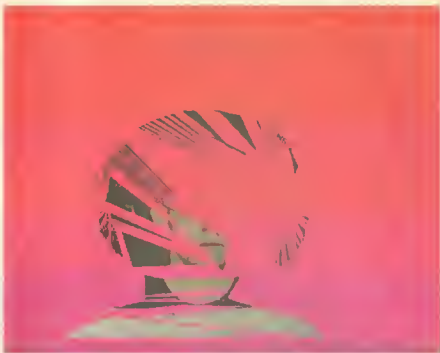
## Step 6

One render later, and you have a realistic (well, sort of) object to add interest to your scenes.

Why not combine it with your other objects, so that your cars have drivers and your spaceships pilots? Because we have created an object of the right size, rather than pasted an image onto a rectangle, even the shadows cast by the virtual person will be correct.

## Tips and tricks

Because we applied the brushmaps as a sequence, the object will render properly when we include it in



▲ Oh my poor head... all possible with Imagine's special effects

an animation. However, sometimes you might want more control over the speed at which the frames change.

Instead of creating one object with multiple brushes, try creating multiple objects with one brushmap each. You can then use Imagine's built-in morphing ability to switch smoothly from one frame to another. This technique works very well when animating clouds and other organic patterns.

Unfortunately it also has weird

consequences: apply it to two frames of a person blinking, and it appears that their eyelids turn transparent!

## Animation limitations

Using a flat object like this in animation takes care.

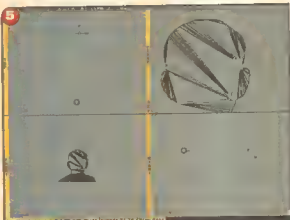
As the object is totally flat, any view other than completely front-on will betray its two dimensional nature. Sometimes you'll want this effect, other times you won't and it will be hard work defining your

objects so that they always face the camera.

Visit the Action editor and play with the Alignment tool, and you might find this makes the task slightly easier. However, if you want to create a solid, 3D talking head then you have a lot of work in front of you.

Creating the mesh for the head is a real challenge in itself, although the example Beethoven bust which came with many versions of Imagine makes a good starting point.





As for mapping a picture onto the 3D surface, well again you have problems.

You really need the equivalent of a map of the person's face, not a front-on photograph. If you aren't squeamish, Imagine unwrapping their face and piecing in on a photocopy—that's the kind of image map you need.

You could approximate it, by photographing your model from many different angles. You could then cut out the central strip in each photograph and use that as the basis of the texture.

It would be time consuming and a laborious process—so I am currently trying to work out a way of automating it, and I'll let you know how I get on.

## Effects

OK, admit it. You're all sick people. I know it, you know it. You want to apply special effects to the head object, don't you?

Like any other Imagine object, you can apply the deformation tools or the special animation effects to warp and shatter the object in unusual ways.

Of course, that was one of the first things I did. Here are some examples of how you can manipulate the object using Imagine's effects. The explosion and other effects are a little disappointing, as the original head object is not constructed from a regular mesh of facets.

This is due to the way the Convert IFF tool works, so there is little we can do about it. It's made worse because the brushmap does not appear to change with the object, which looks more than just a little odd.

That's not to say it's not worth experimenting of course, and thanks to Imagine's powerful deformation tools you can create all kinds of special effects.

You can even use a genlock and add them to your home movies. We'll see it about time Auntie Beryl is attacked by a flying saucer and converted to a pile of pixels with a carefully rendered deathray?

## Coverdisk

Just as we promised you, this month on the CUCD coverdisk you will find a sequence of still images that you can use as your backdrop.

A frame from the moving cloud sequence, so we're supplied on this month's CUCD coverdisk.

In Imagine

The sequence consists of moving clouds, stored in a resolution of 320 by 256. With just a little luck you should be able to use them directly from the CD without having to bother with loading them onto your hard disk.

This would make them absolutely ideal for use as Global Brushmaps for example, which will provide a wonderful reflection in the wind screen of the car that you have rendered. ■

John Kennedy

## Next month

We'll it's been great fun playing around with this program, but unfortunately all good things must come to an end and next month it's going to be the last in the series of Imagine tutorials. In that lesson we'll be taking a good look at planning, designing and rendering a short film from beginning to end. Don't miss it!!



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# Amiga C Programming

## PART 5

**Windows, windows, windows and guess what... some more windows.**

**This month it's all about handling multiple, dynamic windows.**

**T**his month we're going to bring our example a little closer to a real paint program. This involves quite a few changes to the last example of the previous tutorial, the most important of which is the separation of the drawing area and the tool gadgets. In a program like DPaint you have the drawing in one window and the drawing tools in another. To achieve this effect we're going to add a second window, put the gadgets in one of them and use the other solely for drawing.

Opening a second window is not a huge problem and, in fact, the code is just what you should expect by now. The really big changes are to the IDCMP message handler. The "WaitPort()" function can no longer be used because we have to wait for messages from more than one window. To do this we must delve a little deeper into the Amiga's message signalling mechanism.

### Pass the Port

As ever, the complete examples are on the coversdisks, and we'll examine only the interesting bits. The first such snippet is the replacement for the "WaitPort()" from the earlier examples (see the outline in Example 1, taken from "multimw0.c").

Instead of waiting for a message to arrive at a solitary message port (using "WaitPort()") we need to cre-

ate signal masks from both of our windows' IDCMP signal bits (using the bit-shift-left operator, "<"). We then combine these two masks (using the bitwise OR operator "|") to create a mask for use with "Wait()". This will make the program go to sleep until one (or both) of the signals is set, and when this happens the "Wait()" will return with a mask that indicates which signals were set. The resulting mask is stored in "got\_sig", and this can be used with the masks for our windows (and the bitwise AND operator "&") to decide which window has messages that need to be handled (see the outline in Example 2).

Strictly speaking, it's not really necessary to check that "got\_sig" indicates a port's signal has been set before trying to get messages from it, since "GetMsg()" will return "NULL" if there are no messages. But, signals can be used for more than just message ports (Control-C handling, for example), so this code serves as a good template for the general case.

The rest of the IDCMP handling code is pretty much the same as we've seen before, although it has now been separated into the two parts that relate to each window.

### No Front Ears

Next up is a purely cosmetic change: we'll make the drawing window look like it's the whole screen by removing the borders and decorations (window flag "WFLG\_BORDERLESS") and make it sit permanently at the back ("WFLG\_BACKDROP"). You ought to



▲ With the tool bar and screen title

be pretty familiar with a window that you can change from being a normal window to a backdrop and borderless one: it's called Workbench. (You can swap between the two types using the Backdrop item on the Workbench menu.)

One benefit of using a borderless window is that we no longer need to worry about setting up a clipping region, since there are no borders to overwrite (i.e., you can draw on the

whole of the window). And if there's no clipping region to set, there's no need for the Layers library to be opened. So we can trim down the code a little.

The new second window will be kept as an ordinary bordered window to hold our gadgets. We'll also add a long-awaited title, both to this window (using the "WA\_Title" tag) and the screen (using "SA\_Title"). The next bit is then to do some (not

### Message Port

A queue (or list) of messages, held in first-in, first-out (FIFO) order. When messages arrive at a message port (i.e., when a program or part of the Operating System adds messages to the queue), a signal is set, which usually wakes up another program that is waiting to handle the messages.

### Example 1

```
ULONG drawwig, toolwig, gotsig;
drawwig = 1 < drawwin->UserPort->mp_sigbit;
toolwig = 1 < toolwin->UserPort->mp_sigbit;
while (gotsig)
{
    /* Wait for messages to arrive */
    gotsig = Wait(drawwig | toolwig);
    /* Rest of code... */
}
```



## Example 2

```
/* Check messages from the drawing window first */
if (gotmsg & drawmsg)
{
    while (intuiMsg = QT_GetIMsg(drawwin->UserPort))
    {
        /* ...Handling code... */

        /* Reply when finished with message */
        QT_ReplyIMsg(intuiMsg);
    }
}

/* Now check messages from the tool window */
if (gotmsg & toolmsg)
{
    while (intuiMsg = QT_GetIMsg(toolwin->UserPort))
    {
        /* ...Handling code... */

        /* Reply when finished with message */
        QT_ReplyIMsg(intuiMsg);
    }
}
```

very clever) maths to make the tool window open right at the bottom of the screen (see Example 3). Notice that, as a small optimisation, we remember the title bar size from the gadget creation code in "offtop", which we have now made into a global variable.

So what happens to that menu strip that we created last month? Well, it can safely be attached to both windows so that is what we have done. The menu strip is shared, and we'll use this to our

advantage in the next example.

For now, it just means that both windows will have the same menus, and so must both handle the "IDCMP\_MENU\_PICK" message (and do the same things, unless you want to confuse the poor user!).

Try out the new example to get a feel for the way the parts are now working. You can move the tool window around to paint underneath it, but (at the moment) the screen title bar always covers the top of the drawing.

## Dynamic Windows

In the first example, the close gadget on the tool window quits the program and there's no way to get a complete unobstructed view of the drawing window. The second example, "multiview.c" remedies this and adds a new menu to "turn off" the tool window and the screen title bar. This may seem like quite a small change, but if you look at the code you'll see that it's radically different.

To facilitate opening and closing the tool window while the program is still running (and the other window is open) we need to factor out the code for opening and closing the window. A style similar to the library opening and closing code would work if we were to keep a record of the important resources (such as the windows) in global variables. However it's generally bad practice to have a lot of global variables because any bit of code is able to change their values and this can make it harder to debug your program.

In this case using some global variables seems to be a reasonable trade off, and it's quite interesting to see how this style can be applied to all of the resource allocating code. (In fact, this will also enable us to do things like dynamically changing the screen, but we'll leave this for later tutorials.) Spend some time looking at the differences in this example and pay particular attention to which variables are significant enough to make global.

The most interesting new part of this restructuring is initialisation and cleanup code (see Example 4). The boolean AND operator, "&&" used in "createAll()" will short-cut which means that the functions will be called in turn until one of them returns "FALSE". In other words, "createAll()" will return "FALSE" as soon as the first function returns "FALSE" and it will only return

## Signal Mask

The general signal waiting function, "Wait()", can wait for a number of signals at once. These signals are specified to "Wait()" in a signal mask, where each signal is represented by a particular bit in the mask. Because a number of signals can be set concurrently, "Wait()" reports the relevant signals as a mask, too.

## Message

A small package of data that can be passed between applications. As we've already seen, the Amiga's intuition system uses messages to inform a window of things like gadget presses and mouse clicks.

"TRUE" if all of them return "TRUE". So, for example, the program will not try to open the tool window if the screen could not be opened.

On the other hand, the "freeAll()" function just de-allocates everything in the opposite order, where each de-allocation function is "guarded" (it checks that there's something to de-allocate first) and "safe" (it sets the appropriate variables to "NULL" after doing the de-allocation so that the de-allocation cannot be performed a second time, even if this function is called again accidentally).

## Czech Marx

The remaining point of interest is the new tool menu. This contains two check-mark, toggle items: Screen Bar and Tool Bar. Initially, both are checked, since the screen title bar and the tool window will both be active at first. The menu message handling code has been extended to deal with these messages, and in this case we are inter-

## Example 3

```
/* The minimal height of our tool window */
int h = MYTOPGAP + offtop + scr->WBorderBottom;
```

## Example 4

```
int createAll()
{
    return openLibs() && openScr() &&
        createMenuStrip() && createGadgets() &&
        openToolWin() && openDrawWin();
}

void freeAll()
{
    closeDrawWin();
    closeToolWin();
    freeGadgets();
    freeMenuStrip();
    closeScr();
    closeLibs();
}
```

## Example 5

```
case 2r /* Tools menu */
    switch (itemNumber)
    {
        case 0r /* Menu Bar */
            ShowTitleBar, item->Flags & CHECKED;
            break;
        case 1r /* Tool Bar */
            /* Set state to indicate whether the tool window
            should be open */
            openTw = (item->Flags & CHECKED);
            break;
    }
}
```

ested in remembering the menu item corresponding to each selection so we can extract the check value from the "Flags" element.

Because we have used the same menu strip with each window, the states of the checked items are shared, which does save us a fair amount of effort in keeping them synchronized!

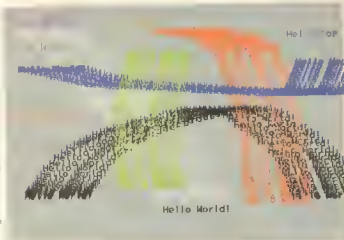
The "ShowTitle()" function turns a screen title bar on and off, and we'll use another global variable to record the user's request to close (or open) the tool window (see Example 5).

## Signal

Part of the heart of the Amiga's multi-tasking mechanism. A signal is basically a flag that can be set or cleared. A program can go to 'sleep' and wait for a signal to be set (using "WaitPort()") or, more generally, "Wait()"). This frees up the CPU to do something else while the program is sleeping. When the signal becomes set (by some other program or the Operating System), the waiting program is woken up (i.e. the "WaitPort()" or "Wait()" returns) and the signal can be acted on.

We can't simply close the window during the message handling because we haven't yet replied to the message, and it might have come from the tool window's IDCMP. So, we must go to all this complexity of recording the close (or open) request and dealing with it later, once all the IDCMP messages have been handled.

Another complication comes from clicking on the close gadget of the tool window. We want this to close the tool window, but not end the program, so the menu strip must be updated to remove the check mark from the Tool Bar item (to keep it consistent). The "IDCMP\_CLOSEWINDOW" code must therefore remove the menu strip from both of the windows, update it and then re-attach it. Luckily, "ResetMenuStrip()" is guaranteed to work if this is the only change we've made to the menu strip, so we don't have to cope with any failures at this point. One failure we must cope with, is not being



▲ ... and without them

able to fulfill a request to open the tool window. This is checked by the code that handles these requests, "checkToolWin()", at the end of the message handling loop. Fairly arbitrarily, the program is quit (by setting "going" to "FALSE") if the tool window cannot be opened again.

## Thanks for the Fish

This month we've covered compli-

cated stuff, but we've now got a decent framework. It's easy to see how it might be extended to a real paint program, but the concepts also apply to many kinds of programs. It's time to start dreaming about the application you want to create, and start trying things out.

Next month we'll move on to look at some useful libraries! ■  
Jason Hulsene

# Next Month

## Open Your Mind!

with Andy McNery of Dex & Jonesey

Master of the banging house brigade, Andy McNery of Dex & Jonesey supplies a totally exclusive track for our CD and takes us through the process of remaking a classic trance tune for a major re-release, divulging tricks, techniques and secrets along the way. Essential reading for all musicians and music lovers.

## Cologne Show News

The biggest Amiga show in the world, and this year it will be bigger and better than ever. With conferences sponsored by Getaway 2000, and major product launches from dozens of Amiga companies, this will be the most exciting show in years. If you can't be there, then do the next best thing and read our in depth report.



## Haunted

We've been promised a good look at this giant multi CD adventure game from Alive media Software. Featuring some of the most impressive rendered graphics seen on the Amiga, this long awaited game is here at last. Prepare to be scared.





# Surf's Up!

All the latest Amiga Internet exclusives for you including news of a possible ICQ port to the Amiga. ICQ? Read on.

**Net God speaks**  
Stating the obvious, a great strength of the Amiga has always been the sense of community. It's impressive to see the bias the Amiga in comms has taken towards community based efforts. Firstly how can one not be dead impressed with Amiga users cracking the top 10 in RC5 stats? Hundreds of Amiga users bending hundreds of computers to the greater task of cracking the secret key in the Bovine effort.

Our news this month also includes the expansion of the Amiga specific IRC network, Amiganet, which is going strong. Via Amiganet Amiga users the world over get together and talk about Lifa, the Amiga and Everything without fear of invasion by troublemakers from other platforms.

So it's timely that the ultimate community aid, Mirabilis' ICQ system, looks set to burst onto the Amiga. Now you'll know when your Amiga buddies are online, you can ask them what they're up to, chat and swap files without consciously launching an IRC client to check if they're online. It may have started on the PC but ICQ seems designed for the Amiga community. Group hug time. :)

## Amiganet shuffle

Amiganet is a new IRC network which is run specifically for Amiga. The result is that it tends to not split less often than the big networks like IRCnet and EFnet.

The UK Amiganet server used to be irc.puresmiga.co.uk but this has since moved to another network. The correct Amiganet server is now stayfree.uk.amiganet.org

Here's a complete list of Amiganet servers, which are all operating on port 6667 with the main channel being called #Amiga

- thula.no.amiganet.org (Norway)
- whiterose.us.amiganet.org (USA)
- kth.se.amiganet.org (Sweden)
- fastlane.au.amiganet.org (AU)
- linux.us.amiganet.org (USA)
- stayfree.uk.amiganet.org (UK)

## ICQ Amiga port

ICQ from Mirabilis, is a multiplatform real-time context, chat and message based system.

It already boasts millions of users and the service itself is free at the current time. ICQ runs when your Internet connection is active and reports on the status of other

select ICQ users as to whether they're online at the same time or not. Messages and/or files can be sent instantly or via the Mirabilis server. It's possible to display your status and message via a web page and more.

ICQ gets the thumbs up from CU Amiga and the good news is that an Amiga port is on the cards. Drop into

<http://www.mcmedia.com.au/amigaicq> and fill it out to express your interest in the port.

## Amiga RC5 effort cracks top 10

The Amiga RC5 cracking effort under the Bovina collective banner has rocketed up the charts to go crashing into the top 10 as we went to press.

This is an extraordinary effort by literally thousands of Amiga users who have access to serious computing power: be they Amigas or not. Current rate of cracking is in the region of 72 Mega keys per second.

That equates to an equivalent computing power of 600 50MHz 68060 machines working on the problem day and night.

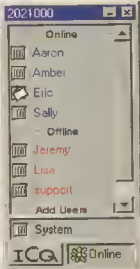
If you would like to view the current statistics check

<http://rc5distributed.net> or join in the RC5 cracking effort yourself by going to

<http://www.cis.ron.nl/~ttavoly/rc5/>

## Sun takes Microsoft to court over Java

Sun has taken the step of filing against Microsoft, citing a breach of contract and various other allegations in his legal action. The suit contends, 'Rather than comply with its contractual obligations, the defen-



dent Microsoft has instead embarked on a deliberate course of conduct in an attempt to fragment the standardised application programming environment established by the Java technology, to break the cross-platform compatibility of the Java programming environment, and to implement the Java technology in a manner calculated to cause software developers to create programs that will operate only on platforms that use Microsoft's Win32-based operating systems and not on any other systems platform or browser.

This piece of information has arrived at a time when Java remains in development for the Amiga browsers via Haage and Partner's Marip project. ■  
Mat Bettinson





# Surf of the Month

This month we chese down the home pages for each of the programs in the Freeware Roundup (page 32).

**S**ometimes it's amusing the sites you run across on the web for how sad they are. One chap excitedly repeated on IRC that Reznor Entertainment's site had exclusive news of Tomb Raider on the Amiga. Checking it out, it's your typical unsubstantiated rumour fodder, a prime example of its sort. The authors can't even figure out how to make a link to Click Boom let alone get the URL correct. On that note I chuckle all the way to Click Boom themselves.

Interestingly, for a company devoted to Amiga users, their web site sprinkles PC only Javascript copiously through it. Fortunately it works anyway and pleasantly I found that they had online ordering for Click Boom games too. The whole site looks fantastic if a little convoluted and graphics heavy.

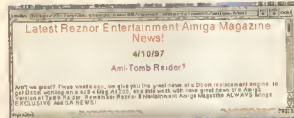
The online ordering is full fea-



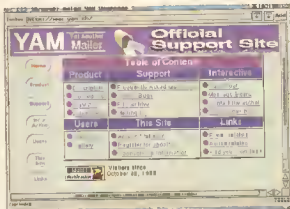
▲ Click Boom's Javascript laden site. Fortunately it works anyway.



▲ Block screens and rendered pages are a vaper. This time the MCP home page.



▲ What's the latest word for if it isn't good old unsubstantiated rumour. For just week fabrications and falsehoods, the Reznor Entertainment site can't be beat.



▲ The case study of the perfect support site. This time it's YAM - Yet Another Mailer.

tured with currency conversion but for some reason they don't think listing the international shipping costs is important.

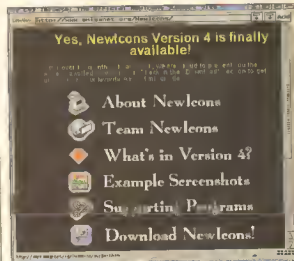
In time from our Freeware round up this month I decided to check out how many of them had... web pages. First the New Icons can be found on the Team New Icons home page.

This is an excellent demo of what the icon set looks like and has plenty of downloads from N4 to all of the available icon sets. It uses PNG images throughout so a datatype on Voyage-NG will be needed to view them. MCP also has a web page at the author's, Alien Design, home page.

Unfortunately there's not a lot to see, very little support files, tips and such forth so it's a bit under utilised. It does always have the latest version often ahead of the Amnet tho-

ugh. Sadly there's no MPEG/SongPlayer web site from Stéphane Tavernard (someone should volunteer to make one!) but the Aussie Cstar makes it his business to port Unix MPEG audio Layer III players and encoders.

You can obtain the latest Cstarware on his home page. YAM does rather better on the web with the home page being crammed to the



▲ The New Icons 4 home page is attractive, well designed and has a concept of downloads

## URL's

<http://frisian.steeds.co.uk/reznor-entertainment/amiga.html>  
<http://www.clickboom.com>  
<http://www.amiganet.org/88wicons/>  
<http://www.ca.to-berlin.de/~sarcodem/alien-design.html>  
<http://linux.us.amiganet.org/cstar>  
<http://www.yam.ch>

gills with support files.

The site is exceptionally well designed and you can find full details about YAM, a FAQ, screenshots, a file archive and more. YAM certainly does seem to look like it is the best supported E-mail client in this regard.

There's also sketchy details on the upcoming YAM 2.0 due around Christmas time.

Mat Bettinson

# Wired World

**Thor 2.5, the best mail and news reader-  
er just got better. Powerful though it  
is, many people find it daunting at  
first. Hopefully, things will become a  
lot clearer in the next couple of pages.**

**T**hore is a combined mail and news reader intended for use with a wide range of message formats, including Internet, Fidonet and various BBS systems. Thor uses a hierarchy of systems and conferences. A system is used for a particular type of message, so you would have one for Internet, one for Fidonet and one for each BBS you use. Most Internet users use a single system, unless they use more than one ISP. A conference is a message area within a system, and can be a newsgroup, mailing list or general E-mail folder.

Within this setup, almost every thing is configurable, but most things can be left at their defaults for initial use. It is this level of configurability combined with terminology that is sometimes unfamiliar to Internet users, that makes Thor appear more daunting than it really is.

## Installation and setup

The first thing to do is install Thor on your hard drive. All the files you need are in

CUCD17 CUDD/Magazine/WiredWorld/Thor. You cannot install direct from the CD so copy this directory to somewhere temporary on your hard drive (or RAM).

The installation process is fairly straightforward, and also covers configuration of Thor to work with your ISP and account. When asked if you want to install the Internet modules, answer Yes and choose the TCP and UUCP modules to install. Select Yes when asked if you want to configure your TCP information, if you use SMTP mail (such as with Damon) you should choose UIMail for the download directory.

Now choose a name for your Internet system. It can be called whatever you like, but the default of Internet is as good a name as any, unless you want to use multiple systems for multiple ISPs. The installer will now start Thor's TCP configuration program, to allow you to set up the account details for your ISP. This has four pages, selected by tabs.

Enter your E-mail address and



## Where to get Thor...

If you don't have the CD, you can get the files from the comm/thor directory of Amnet. The ones you need are: thor25\_main.lha-this contains Thor itself; thor25\_inet.lha-the internet modules; thor25\_arxx.lha-arxx scripts for Thor-recommended.

Also available is thor25\_bbs.lha, which contains the modules for BBS, Fidonet, etc. The 25 in the filenames represents the current version, 2.5, this may have changed by the time you read this.

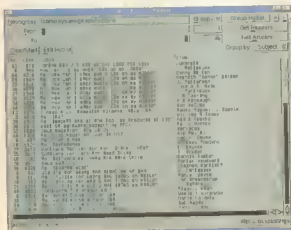
Unrar the main archive and copy the inet and arxx archives into the Thor directory this creates.

real name on the first page, the other items may be ignored for now.

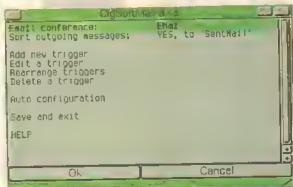
The second page contains the settings for your E-mail account. If your ISP uses separate machines for sending and receiving mail, untick the Use Multiserver box and enter the address used for sending mail such as send.mail.net.com or post.demon.co.uk. If your mail account is the same as the part of your address before the @ symbol, you needn't enter a login name. Thor extracts it from your mail address. Wirenet and Damon users should enter their hostname here. Finally, untick the password box and type your password, or else you'll have to give it whenever checking for mail.

Most people find default settings on the News page fine, so just give the name of your news server. Later on expansion with the number of sockets used for news collection (to see which is fastest) but leave it at 4 for now. The Amnet page is for Thor's ftp download facility (more on that later). Choose the site best for you and specify which directory the downloads should be saved in. Finally, click on Save. Once the installation is complete, start Thor.

First time you'll get a warning about the Global configuration. click OK, then Global and then save. Now close the configuration window, and select your system. Click on next and you'll see an introductory message.



▲ Using the news browser.



▲ GlobalMail ready to automatically set up a mail sorting trigger.



## Useful utilities

There are some useful utility programs in the Extras directory on the CD, these are also available from the comm/thor directory of Aminet. **AminetParse:** Fast adding of Aminet INDEX and RECENT files. **MLManager:** Automatic subscribing to mailing lists, creating a SertMail trigger at the same time. **NewsGroupEd:** Extra features for managing a newsgroup list

## Using Thor

Right, now it's installed let's try some mail and news. Click on the White button in this toolbar, type in the name, address and subject and make sure the conference gadget says Email, click on OK and the editor opens. Write your message, save it and quit or Iconify it now. Select Join Conf from the Event commands menu, you don't have a full list of newsgroups in the system yet, so type sit sys emige thor in the third gadget at the bottom of the requester. Select Gai Confmail from the Event Commands menu to download your JSP's full newsgroup list.

You don't need Thor running when you go online, so you can either quit or Iconify it now. All Internet online actions are handled from a separate program, ConnectTHOR, start this up and then go online.

The first four buttons are self-explanatory. Config TCP starts up the configuration program you used to set the server information during installation and Browse News fires up the online newsgroup browser.

Restart or Iconify Thor and you'll see the messages you've just downloaded. The first thing you'll want to do is set Thor up to suit your way of working. There are three main windows used when reading messages: open the Confmail and Msglist from the Windows menu. If you use a 640x256 screen you'll find things a bit cramped, so it's best to only open these when needed, otherwise, position the three windows how you like. Now select the Configuration/Visual Options menu item, the Save Global button saves the position and status of every window, so you can ensure closed windows open wherever you want them to. While you're here,

turn on Colour quote, Double Quote Style Tags. You can also set how Thor highlights URLs and the action taken when you click on one.

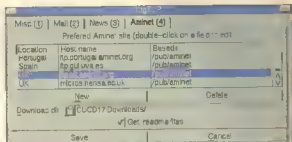
## Mail sorting

Because of the way Thor treats Email and newsgroups differently, it's easy to treat mailing lists in the same way as newsgroups. There are powerful sorting procedures applied to all mail as it is imported, you can set up triggers for each mailing list with the ARexx script CfgSortMail.thor. Make sure a message intended for the mailing list is displayed in the main window, start up CfgSortMail.thor and select Auto configuration. You will be asked for a name for the mailing list and a trigger will be created using the information in the current message.

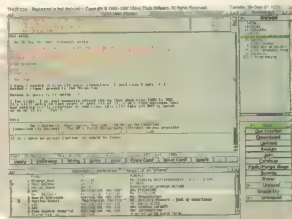
## FTP

The idea of building FTP into a mail and news program may seem a little strange at first, but it turns out to be extremely useful. If you import the Aminet index into Thor's file database, you can subscribe to the Aminet mailing list and new files can be automatically added to the database via a SortMail trigger. The new files each day can also be displayed in a window, so you only need to click on a file and it will be marked for download. I find this incredibly useful for collecting software for the CUCDs. I scan the NewFiles window each morning and click on anything I think may be suitable. There's no need to go navigating Aminet's directories with an FTP program, the whole thing is done automatically.

You first need to set up the file database. Download the latest INDEX file from Aminet, and use AminetParse to import it. There is an ARexx script to do this, but



▲ ConnectTHOR after using Gai Mail



▲ My Thor setup, fancy backdrops are possible, but turned off for maximum readability.

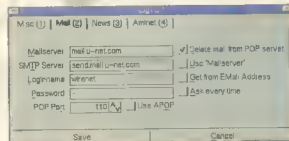
AminetParse is many times faster, and is included in the Extras drawer on the CD. Copy Aminet Parse to Thor's bin directory and AddAminet.thor to Thor's exec directory. Then execute AddAminet.thor from the ARexx menu.

If you change your mind about a mail you've written, open the Events Editor from the Windows menu, this shows a list of all queued mail, news and file events. You can edit and delete events, or freeze them until later (useful if you want to delay large FTP downloads until the evening or weekend). There's many options to configure, but defaults

are a good starting point. Look in the various configuration windows to see what is available, context-sensitive help is available from the HELP key. Remember the Browse News button in ConnectThor! It's for online newsgroup browsing and is dead if you want to grab a selection of messages, rather than a full feed, or download a specific article.

We've only scratched the surface of what is possible with Thor, so look at some of the ARexx script to see what else is possible and read Thor guide and subscribe to the Thor mailing list also. ■

Neil Bothwick



▲ Setting up E-mail parameters during installation

## Online Thor resources

There is a support mailing list, send a mail to majordomo@thule.ne with "subscribe thor-m" in the body of the message. The Thor web site is at <http://www.thule.ne/thor>.

Program updates are available from the web site or by ftp from <ftp://ftp.thule.ne/pub/emige> and the comm/thor directory of any Aminet site.

# Sound Lab

## Image Processing Techniques for Audio



**What... use an image processor to add effects to your audio samples? Well, anything's possible you know.**

**Requires:** SOX and Play16 (not included) + everything in the *SongClips* Sounds and Sounds-Processed directories (included).

Last month we introduced the unusual technique of using image processing software as a tool to manipulate audio data. Now, we will further apply the technique to create some interesting effects. We'll also take a look at using the image processor to generate new sounds from scratch.

To hear the potential of this unique method of sound processing listen to the song clips included in the *SongClips* sub-directory. First, a quick recap of the processing method covered last month:

**STEP 1:** Preparing the audio file. To load a sound file into image processing software we first need to convert it to a format common to both audio and image data. Raw. This can be done simply with a program like SOX.

**SOX** Piano.iff Piano.raw

**STEP 2:** Loading the audio file

If the image processing software does not contain a RAW loader module, the Sculpt module can be used. For 8-bit audio files use Sculpt Grey.

The loader will prompt you for the width and height to use for the image. Use dimensions that are large enough to accommodate the entire audio file. **WIDTH \* HEIGHT = RAW BYTES**

**STEP 3:** Processing the loaded data. Perform whatever image processing functions you like on the loaded sound.

**STEP 4:** Saving the data. If provided, save using a Raw saver module, otherwise use a Sculpt module.

**STEP 5:** Listening to the modified sound.

To hear the raw sound, use a program such as Play16 and indicate the frequency to play back the sound at.

**Play16** FREQ=16780 Piano.raw

### Tutorial - Part 2

For the following tutorial, we will again use ImageFX 1.52 from the coverdisk of CU-Amiga - June 1995 to do the data manipulation.

However, the methods described here can be easily applied to most image processing programs. For audio playback and audio format conversion we have included Play16 and SOX, respectively, in the SoundLab directory.

Also in the Sounds/ sub-directory we have included some sounds to experiment with. In the Sounds Processed/ directory you will find some examples of these sounds after having been processed with ImageFX using the methods that are described here.

### Solarize

As with most of these processes the effects of the data manipulation can be very different with different sounds. The solarize image effect is a good example of a process that can have very different results.

Load the Sounds/Piano raw sound using a width of 300 and height of 288. From the toolbox, select Color and then Solarize (Figure 1). This is a preset function so it does not have any options. Then save the sound as Piano-Solarize raw and listen to it with

**Play16** FREQ=16780 Piano-Solarize.raw

The effect is not drastic but makes

the piano sound like it is swarming with noisy bees. Compare it to the original Piano raw sound.

**Play16** FREQ=16780 Sounds/Piano.raw

Load the Sounds/Thunder raw sound using a width of 250 and height of 281. Perform the same solarize function and save the result as Thunder-Solarize raw. Listen and compare it to the original.

**Play16** FREQ=16780 Thunder-Solarize.raw  
**Play16** FREQ=16780 Sounds/Thunder.raw

The effect here is very much like a low and audio filter. To hear a more obvious example of this filtering effect, perform the solarize function on the Sounds/Sine raw sound. Load it using a width of 256 and height of 256.

Perform the solarize and save it as Sine-Solarize raw. The low end filtering is very obvious with this sound. Listen and compare with

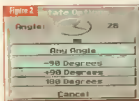
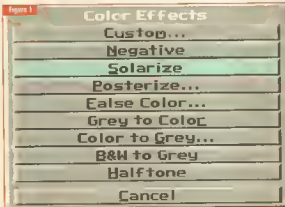
**Play16** FREQ=9600 Sine-Solarize.raw  
**Play16** FREQ=9600 Sounds/Sine.raw

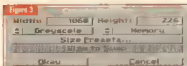
Image processing functions can have a very interesting effect on vocal samples. Listen to the Sounds/YM/Mind raw sound to hear a normal voice speaking.

**Play16** FREQ=9600 Sounds/YM/Mind.raw

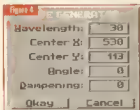
Now, try the solarize function with the Sounds/YM/Mind raw sound. Load it using a width of 200 and height of 141, solarize, save it as YM/Mind-Solarize raw and listen with

**Play16** FREQ=9600 YM/Mind-





This is still a drastic change from the original speaking voice, but the change in rotation angle gives a much nicer result for this sound.



If you needed a good electronic sound then it could be a very useful one to use.

## The Laser-Copter

So far we have only used the image processing software to perform effects on already existing sounds. We can also use it to generate new sounds from scratch.

To begin we need to create a buffer to store the image that we are going to create. From the tool box, select Buffer, and then Create Buffer. Set the width to 1060 height to 226 and make it 8 Greyscale buffer (Figure 3). The width and height values given here determine the length of the sound file, so  $1060 \times 226 = 239560$  bytes. At a playback rate of 16780, that will give us 14.28 seconds of sound.

Now that we have our buffer ready, let's create something to put in it. From the toolbox, select Alpha and then Create. From the Create Alpha Channel request, select Wave Generator. Set the Wavelength to 30, Center X to 530, Center Y to 113, Angle to 0 and Dampening to 0 (Figure 4).

This function generates the wave in an alpha channel buffer, so when the function is complete we need to copy it to our image buffer so we can see it. To do this, from the tool box select Alpha and then Copy From Alpha (Figure 5). Save the result as LaserCopter30.raw but do not listen to it just yet.

You can alter the pitch of the sound by changing the Wavelength value of the Wave Generator request. Setting it to a higher value will generate a sound with a lower pitch, while a lower value will result in a higher pitched sound.

Try the process again with a Wavelength of 5 and save it as LaserCopter5.raw. You can also change the pitch by using Play16's Freq parameter, but this would change the length of the sound also.



## Signed vs unsigned

Another thing to understand is that image processing software works with its data as unsigned values.

That means that all values are greater than zero. This is generally the way that all image data is stored, regardless of the software being used. However, this is not necessarily the case for audio data. On platforms such as the Amiga and SGI, audio data is stored as signed with positive and negative values.

While on the Mac, PC and ST data is stored as unsigned values. It is important to keep this in mind when playing back sounds as they can sound very different if they're played wrong.

The Laser-Copter sound that we just generated demonstrates this very well. The image processing software will create the image with all positive values. But, since the Amiga uses the signed data format for audio, Play16 will use that by default when playing back the sound. For this example that assumption would be wrong. Try it.

Play16 FREQ=16780  
LaserCopter30-2.raw

To hear the sound properly, it is necessary to tell Play16 that the data format in the raw file is unsigned and should be played back as such.

Play16 FREQ=16780  
LaserCopter30-2.raw UNSIGNED

If you compare the audio waveforms in Figures 6 and 7 with the image in Figure 5 you can see that Figure 7 is the closer representation. Instead of using the Unsigned option of Play16 you could first use SOX to convert the file.

```
SOX -u -b -r1000  
LaserCopter30-2.raw -a  
LaserCopter30-2.raa
```

will do the conversion.

The -u indicates the source file is in unsigned format -b indicates that the source is in 8-bit byte format -s indicates the destination file should be in signed format.

Note that SOX requires that a rate (-r) be given for the source file. For Raw data this value is not used, so it does not matter what value you use here. Refer to the SOX documentation for more details. Having converted the format already, it is no longer necessary to specify the Unsigned option. So, this will now work.

Play16 FREQ=16780  
LaserCopter30-2.raa

## The Big finish

These unique processes can produce some very useful results. But like any great experimental technique, it does take time to get good results.

In many cases, it may be necessary to clean up the created sounds by using audio waveform editing software to filter unwanted noise or out beat sections.

Sometimes, even a small section of a processed sound is enough to make a terrific percussion sound or some strange instrument.

Diomedes Trena

## solariss.raa

This effect will make the voice sound very nasal and cheesy. Add a pocket protector and a pair of glasses as with some white tape on the nose bracket and we have got a real nerd here!

It's easy to see that it is important to experiment with an effect on several different kinds of sounds. Or else you may never know the potentially great surprises that you've missed.

## Rotate

The rotate image effect can have some very interesting and very drastic results.

Load the Sounds/YMMind.raw sound using a width of 200 and height of 141. From the toolbox select Rotate, set the angle to +26 degrees and select Any Angle (Figure 2) to start the process. Save it as YMMind-Rotate+28.raw and listen with

Play16 FREQ=9600 YMMind-  
Rotate+28.raw

This is a very drastic change, but not that useful, unless you like saucy sounds like this.

Reload the original sound, or use ImageFX's undo function and try the Rotate effect with an angle of -80 degrees (Figure 2). Save it as YMMind-Rotate-80.raw and listen

Play16 FREQ=9600 YMMind-  
Rotate-80.raw



# Desktop Publishing

## Professional Page 4.1



**Larry Hickmott kills two birds with one slightly used pen as he works through a tutorial on using DrawStudio Lite and ProPage to create an eye-catching CD cover.**

**O**n the front cover of last month's CU Amiga, you were given a truly wonderful freebie in the form of DrawStudio Lite. To celebrate that fact while continuing with our tutorials on using Professional Page, in this month's workshop, I want to show you how you can create a great looking CD covers.

The cover is two sided and fits on an A4 portrait page. The top side of the cover will contain an eye-catching image which we'll create in DrawStudio Lite and on the back side of the cover some text produced in ProPage.

### Start here

Your first job is to create in ProPage a template for the two sides of the cover. Run ProPage, create an A4 page making sure that you have no Margins and two Columns.

What this does is to give you a vertical centre line providing you have "Show Columns" on in Layout Tools. The line is used for aligning your boxes so they are centred on the page.

Once the page is created, save the document to disk giving it an appropriate name. The basis for this

cover is a box 120mm by 120mm, so use the Box tool to create a frame any size double click on it and then enter the size in the Width and Height gadgets. To position the box where we want, take the centre handles of the box and line them up over the dotted centre line running down the page.

To finish up, create some crop marks on each corner of the box. These can be any length but should stop short of the edges of the box. A trick here is to turn off "Box Outlines" (Ctrl-B toggles this) and then give the main box a temporary outline by making sure its active and pressing Ctrl-F. This creates a less cluttered screen on which to work. To turn off the box frame, press Ctrl-F again.

To save paper wastage, we need to create a second cover for this sheet of paper and this is done by first using the Group tool to group all the elements (box and crop marks) and then press Shift K (duplicates the active group). Press and hold down the Shift key and then use the mouse to drag the group underneath the other cover.

Again, use the centre line down



▲ Here is how the sample CD cover looks when exported from DrawStudio V2 in 24-bit

the page to line it all up.

The only thing you need to do to clean up this little lot is delete a couple of crop lines which will overlap between covers. This document should then be saved to disk under a new name as a master template. To avoid over writing this document, save the file again giving it a name appropriate for this cover.

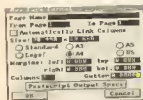
### More templates

The page you have just created will be for the front cover. You now need a page for the underside of the cover and this is created by first choosing "Make Template/Even" from the Page menu. Now choose

"Create from Template" and choose Even as the basis for the page. You now have two pages with the boxes in the same place so when you print back to back, everything will line up sweetly. Save your work so far.

### DrawStudio Lite

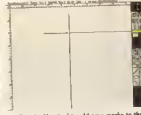
Now we turn our attention to DrawStudio Lite and the creation of an image for the front cover. The ways of going about this are infinite but here's a simple method to get us started. Choose the Rectangle tool, hold down the Shift key and draw a box approximately the size of a CD cover. It doesn't need to be exactly 120mm but you should have



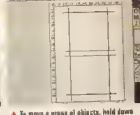
▲ Choose "Page/Create from Default" to make an A4 page with no margins and two columns.



▲ Use the Box tool to create a frame and double click on it. Change the Width and Height to 120mm and click OK.



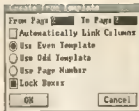
▲ Use the line tool to add crop marks to the box for your CD cover. Hold down the Alt key as you drag the mouse to keep straight lines.



▲ To move a group of objects, hold down Shift, drag one of the objects in the group and all the elements will move at the same time.



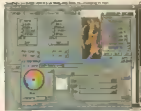
▲ To create a template of that page, choose **New Template** from the **Page** menu.



▲ You can now create a page from the Even template on you have two identical pages in your project.



▲ The requester you'll see when filling your box with a bitmap in DrawStudio Lite. Notice how "Fill Type" is set to "Fill to Object".



▲ To create a transparent colour in DrawStudio Lite, it's only useful if exporting as printing the image in 8-bit greyscale.



▲ The "Fill Type" in this screen grab is out to fill and the dpi is 1200. DrawStudio allows you to use the one bitmap in different ways from filling an object whole or filling it at many different resolutions.



▲ To export a finished image from DrawStudio Lite, choose **Project/Export/Bitmap**. Options, 8-bit colour or 9-bit grey, 8-bit colour, leaves any transparency applied to objects. V2 allows 24-bit output on transparency is retained.



▲ You can export your image as a variety of formats which is very useful if you are using different types of computers.



▲ Here is our finished image. All the elements are now ready to be grouped and exported so they can be placed onto the page in Professional Page.

en idea now of how big the box should be on the A4 page from the work we have just done in ProPage.

You now need a bitmap for the box, preferably one around 840 pixels wide and square in shape. Make sure your box is selected and then choose **Object/Attributes**. Click on **Bitmap** and then on **Edit**. In the **Bitmap** list, click on **Edit** and in the **Edit Bitmap** requester choose **New** to load a bitmap and then give the bitmap fill a name.

Now choose the **Rectangle** tool and create a box over the picture and fill that with a transparent colour. This is done by choosing **Object/Attributes** clicking on **Solid**, then on **Edit**, and in the **Colour** list, click on **NamedEdit**. In the **Edit Colour** requester create a white colour if one doesn't already exist (255 255 255) and then change **Opacity** to 70%. Click **OK**. **OK** and **OK** again. As you can see the box is partly transparent which is a useful trick to know when you want to place something like text over an image without it getting lost in the background.

There is however a fly in the ointment to the above steps. Later on, we will be exporting this image and the transparency will be lost if you choose 8-bit colour because transparency requires either 24-bit export (available in version 2 of DrawStudio Lite) or 8-bit greyscale (available in DrawStudio Lite). This also affects printing.

## Moving on...

Now add some text in a really bold font. This text should be the name of the CD or part thereof. For example, I've called this sample, "Fishy Pix" and used the words **Fishy** and **Pix** in different ways. The bitmap fill for the text is the same as the main fill but this time, tiled with a high DPI setting. This is an example of using the same bitmap fill but in different ways.

Now clone (Right **Amiga** T) the text and create a black (or other colour) shadow which is placed slightly offset to the left and above of the original. Follow this with a second shadow, this time in white, slightly to the right and below the main text.

A second piece of text is created which runs down the left of the box on the part not covered by the transparent white box. This second piece of text has been rotated 90 degrees. Like before I have filled the text with the original bitmap tiled as well as adding a black (or other colour) and white shadow to create a 3D effect.

To finish off the cover, add some inset pictures and logos to make it look ultra professional. In the sample here, the inset pictures are created by taking a rectangle, warping it, filling it with a new image and then creating a clone and filling that with yet another new image.

To conserve memory, use for the inset pictures, images no more than

320 pixels wide.

## The finished article

Once the image for the CD cover is finished, select all the objects and choose **Export/Bitmap** from the **Project** menu. The size of the bitmap exported can be anything from 600 to 800 pixels wide for excellent reproduction on most desktop inkjets.

You certainly shouldn't see any jaggies or any pixelation at that resolution. If you do, then you should try setting a higher resolution.

The image can now be exported in 8-bit colour or 8-bit Greyscale. Remember what I said earlier about how using 8-bit colour will result in you losing the transparency of the white cover over part of your image. If you want more colour and anti-aliasing you need version 2 of DrawStudio available from LH Publishing.

With the image exported and saved to disk, you are now ready to import it into ProPage as the basis for the front cover. Don't worry if the colours don't all show in the 255 colour screen-mode as they will print fine. Personally, I leave ProPage in the **Black and White** screen mode



▲ This is a sample in the 8-bit colour image imported into a box in ProPage. Notice how the background has been dropped out to white. This is because transparency is lost when exported as 8-bit colour. If you want transparency retained, choose 8-bit grey as get DrawStudio V2 which has 24-bit support.

and although the image doesn't look great on-screen, it does print fine and I also find ProPage zips along a lot quicker than when in colour mode.

I'll leave the final touches up to you but don't forget to look in the instructions for your CD on page two and add any text to the image that is required. When ready print page one, turn the paper over and then print two.

That's about it then for this month. In the next issue, we're going to be looking at using DrawStudio Lite to create some titles for use in ProPage or for those net freaks that are among you, on your WEB pages.

Lesley Hickmott





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# Q&A

No matter what the level of your technical problems, if you put them to our experts they'll try their best to fathom things out. Also, please remember to provide us with as many details on your systems and problems as possible, to help us in helping you.

## Logos

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## Trashed Workbench



We recently bought our daughter a second hand Amiga A600 which was working fine until we tried to install an Oki Maroline 380 printer through the Workbench preferences. When we tried this we found that the preferences had been trashed and as we looked further we found that all the discs - Workbench 2.05, Extras 2.05 and Fonts 2.05 - had numerous trashed files. Can you advise me how I can get a replacement?

Mr A. Lomas,  
Manchester

This just goes to show how important it is to make backups of your Workbench. As soon as you get your machine up and running, you should back up these disks as your computer's full functionality relies on it.

The best bet for replacements might be Power computing (tel 01234 851500) but we strongly advise you to look into why several disks seem to have been trashed. You may have a virus on your system, get a virus checker from your local PD house and run it over your disks. It is also possible that your floppy drive mechanism is starting to wear out.

## Swing eights



I have a particular interest in using my Amiga for music (not mods). I use a sequencing set up with a Yamaha TG100 tone generator and an AY10 drum kit, so I have no immediate plans to build a Project



XG. However I am looking forwards to the interest project XG will generate and there will be many who want to add XG sounds but won't necessarily be confident about assembling the project. As an alternative approach may I suggest something like the Yamaha MU10? This costs around £199 and is basically an XG soundbox which works via midi connectors.

I noticed that the PC now has a wide range of sequencing and notation software available. Would you do an article on music software available for the Amiga? It would appear we are being left behind.

A requirement I recently had was to be able to write in 'Swing Eights' can you tell me about any Amiga software that can cope with this?

Dave Roberts, W Yorks.

To be honest, there haven't been that many developments on the Amiga music hardware/software scene over the last couple of years. We could say to ourselves "Let's do a music feature!" then find out there's nothing much new to say but do it anyway (for instance, interviewing people who have never even used an Amiga to make music). However, we feel that wouldn't be giving you the best service, nor the best economy of pages.

Most of the developments are happening in the software scene, with the continual evolution of trackers and the very promising Camouflage MIDI sequencer. That's one you should definitely check. We're not sure if it'll suffice for your swing eights, but it's odds on that it will.

## 1438 blues



Recently I ordered a 1438s monitor from First Computer Centre and on delivery I experienced a few problems. If I used any of the higher scan rates, strange horizontal lines and distortions of some of the icons occurred.

I had a lot of trouble in getting all of my money back as they assured me that they had tested it and there was nothing wrong with the monitor. I am aware of the stray magnetic field problem but I don't think this can have been the cause. First Computer centre suggested there may be a fault with my computer. I have an A1200 with 6Mb RAM, an FPU and a hard drive.

I am now very cautious at the thought of trying another monitor.

so could you help me by suggesting any other possible cause of the problem?

Gereth Hill, Barnstable

It's difficult to be sure without seeing it, but it sounds to me like you are suffering from a common problem with your A1200. Some A1200s have an obscure hardware flaw which causes interference on higher scan rate screens such as Multiscan and DBLPAL. This usually manifests itself as white flickering horizontal lines. The easiest way to tell whether you are suffering a problem in the computer's display hardware or with the monitor is to observe the behaviour of the interference when you drag a screen. If the interference drags down with the screen then the problem is with your computer, if it stays where it is it's probably the monitor, although dodgy connections and faulty cables are also a suspect.

The interference problem some Amigas have with the higher display modes usually goes away after the computer has had a little time to warm up. The exact causes are uncertain, but we have heard of a possible hardware solution. Apparently it can be fixed by shorting out the tiny surface mount resistor marked E127R. This can be found on the underside of the board beneath the chip marked "Alrica". We haven't tried this ourselves yet, so do progress with caution!

## Hot Blizzard



I recently purchased a Blizzard 1230-IV accelerator with 8MB of RAM for my A1200. It gives out a lot of heat making the trapdoor cover hot. I raised the Amiga a little to allow some ventilation, but it didn't help. Then I drilled some holes into the trapdoor cover, but still that didn't cure the problem.

Therefore, I decided to buy a tiny cooling fan from Tandy. It is small enough to be squeezed into the trapdoor compartment, but I am unsure what the best way of supplying the 12V the fan needs. Do you have any suggestions?

Gary Colville, Scotland

68030 accelerators do get hot, it's the nature of the beast. Just so long as nothing is being scorched, this shouldn't be a problem. Does your computer crash a

lot with the board in? If not then the CPU isn't really running too hot. Of course there is nothing wrong with cooling it, and a fan is a good way of doing so. Getting power to the fan isn't too hard, but will require a little slybery pokery with the wiring. CPU fans are designed for CPUs in cases and tend to have a connector which plugs onto one of the spare 3.5" device power connectors, the type which would normally power a CD-ROM drive or a 3.5" hard disk drive. You can get an adaptor which will plug into the floppy disk drive power header on your motherboard from most Amiga hardware suppliers.

## '060 too slow!



I own an Apollo 060 card and recently purchased the CD version of Cinema 4D to gain full advantage of it. When I installed the correct FPU version (there are 2 FPU versions on the CD, one for Phase 5 boards and one for other '060 cards) I noticed that the program, when rendering, crawled along very slowly and the mouse when moved would jump rather than move smoothly. I installed the integer version and found that it rendered about 10 times faster than the FPU version (under both FPU versions). I have installed the 68060 library and 68040 library which came with the board correctly.

I contacted HiSoft and was told that this was caused by the fact that the FPU calls were not being emulated on the 060. They told me I needed a piece of software called Cybapatcher although they weren't sure it would work on the Apollo. When I borrowed a copy from a friend I found it did not. I have just read the review of the Apollo 1260/68 card and noticed what your reviewer said about Cybapatcher. Would this program help me with my 50MHz card? Would it enable me to run TFX at a reasonable speed? Currently I'm sticking my old 030 card back in the machine to get best performance out of it.

In general the '060 card has made a definite difference, viewing Jpegs is a breeze and Frontend runs in smoothly in maximum detail setting but imagine 4D suffers the same problem as Cinema 4D when rendering.

I have contacted Eyetech who supplied the card and they too are bemused by the problem.

Graham Stevenson, Glasgow

## Tech Tip: Over-clocking



It is a term you'll probably have heard if you have an accelerator it may allow you to modify it for greater speed. Some people think it leads to hefty repair bills, other people think it is a great way to increase the speed of their Amiga for a minimal cost. We don't recommend the procedure if it is up to you to decide the pros and cons, but if you want to do it, we'll tell you how it's done and advise you on the best ways to avoid any potential pitfalls. If you aren't reasonably confident, don't do it. It is reasonably safe if you are sensible, but you can blow up your CPU if you make a mistake, and your guarantee will be voided by the procedure. If it happens, don't blame us.

The principle behind over-clocking is very straightforward. When you buy an accelerator which runs at say 50MHz, it does not run at that speed because of something inherent in the design of the CPU, it runs at that speed because of the clock which sends it a timing pulse 50 million times every second. The printed speed is merely the one the manufacturer guarantee it works at. Getting the CPU to run at a different speed is a matter of sending it a clock pulse at a different speed. There are fairly tight limits, but it is quite feasible to up the speed of your accelerator by around 20%.

On your accelerator you will see a small square or rectangular silver chip like this. It will have a whole bunch of numbers printed on it, the last of which is usually the clock speed in MHz. Expect there to be a lot of digits after the decimal point - if you have a 50MHz accelerator it will say something like 50.000000MHz. This is the clock, and amazingly reclocking simply means replacing it with a faster one. These can be bought for a few pounds from most electronics retailers.

If you're lucky you'll find the clock is mounted on a socket and can simply be pulled out. If you are unlucky you'll find that it has been soldered into place, in which case steer clear if you aren't a good soldering iron jockey. De-soldering from an intricate PCB is very hard. If you do take on the task, use a solder sucker

or desoldering braid and remove the solder slowly over several passes, not holding the iron to the board too long at any one go to avoid damaging the tracks.

Notice one of the corners of the clock is either marked with a dot or squared off or both, this shows the clock alignment. Stick to this when you insert your next clock. When the old chip is removed, drop the new one in its place and away you go.

## How fast is safe?

There are very real limits to how much a processor can be clocked, although it varies from chip to chip. Some people may find that even the smallest amount of over-clocking will lead to immediate system crashes, others can get away with murder. If you are using a cheaper accelerator board in which the processor is already clocked, it's not really advisable to try it. As a very rough guide:

Original Processor .....New clock	
030/33	42
030/50	50
040/25	33
040/33	40
060/50	64

Some people have systems running faster than this, others have problems going this fast.

An interesting exception is the new mask revision of the '060, which has the serial number XC8060RC50A. This is the chip used on the Amiga 1260/66MHz board, and we have had it running at up to 80MHz, just about.

## What can go wrong?

Assuming you've installed properly, and you haven't been silly with the clock speed, not much. If the computer crashes a lot, you may have to give up and re-install the old clock, but otherwise it should be ok. You'll be running the chip at its limits, so keep it cool. Ensure good ventilation to the CPU and make sure it has a good fan on it. Another factor is RAM speed. Slower SIMMs are problematic, and with faster clock speeds you'll need fast SIMMs. Even 80ns SIMMs may not be up to it in some cases, although there are also significant brand to brand variations to make life more interesting.



The '060 is a lot faster, as you have noticed when it comes to the jpeg decoding atceters. 3D rendering is a little bit of a special case. Certain programs such as these use FPU functions, and here you can run into problems. With older programs, the FPU code is written assuming a 68881 or 68882 co-processor. The '040 and '060 have somewhat different instructions set and a different way of calling FPU instructions. The 68860 library and the 68040 library do enough between them to allow the processor to function, but this does not mean that all the FPU problems are solved, far from it.

Cinema 4D has an integer version for people with no FPU hardware whatsoever, and this is much the slowest version. The FPU version functions with the 6888x instruction set and is also recommended for '060 users with Cyberpatcher. This is the software phase 5 apply with their '060 boards. The version for other '060 boards is an odd one. If you properly implement a true '060 version of your code, it ought to be more optimal than 6888x code. I would assume that the version of C4D for other '060 versions is written with '060 code, in which case it ought to be better on cyberpatched boards too. Apparently not.

Cyberpatcher is written to run on phase 5 boards only. Oxypatcher does a very similar job, but will run fine on your Apollo board. If you get it try running the FPU version recommended for use with cyberpatcher, you should find it considerably faster than the integer version. And yes, it will make both Imagine and TFX

go a lot faster.

## A530 must go!

I currently own both an A500+ and a bog standard A1200. The A500 has a GVP A530 sticking out the side of it. I would like to expand my A1200 but I lack the funds to add much to it. So I was wondering if it would be possible to use the A530 with my A1200 using a squirrel example? If so what exactly do I need to use to achieve this? Also, will the A1200 have access to all the A530's functions?

Paul Dalton, Lancs

The incompatibility between the A500 expansion slot and the A1200 was the reason for a lot of people to not upgrade. There was never a converter made, but as you have spotted, this does not mean throwing absolutely everything out. The squirrel interface provides the A1200 with a SCSI bus, which is what the A530 has. Unfortunately this does not mean you can just plug it in, the A500 expansion slot is a complex DMA slot very similar to a Zorro slot.

The SCSI bus is implemented internally to the A530. This means that the only thing you'll be able to get out of the A530 via a squirrel is access to the hard drive, which is a SCSI device. You would have to run a cable from the squirrel to the inside of the A530. There is no chance of getting the accelerator to run on an A1200, and even the RAM can't be used as it is

GVP's own brand and won't work in any other processor. For the work involved it's barely worth it, check out the price of hard drives these days, you may find that the cost of sticking a hard drive in an A1200 is a lot cheaper than you thought.

## 2x not enough?

I run an A1200 with 6MB HD and an Arva ACD300 2 speed CD-ROM drive via a Squirrel interface. Is it possible to upgrade my CD to a faster speed? In January I bought a copy of the Epic Encyclopedia and afterwards found it required a 4 speed to run properly.

Mr J.W. Fry, Doncaster

When software states that it requires a 4x minimum, this is usually because it tries to equal animations from the CD. This technique allows you to play far larger animation sequences that could comfortably fit in memory. This needs data to be sent from the CD fast enough to keep up with the animation, hence the need for fairly fast drive mechanisms.

The good news is that if you want to upgrade your drive, it is just a matter of buying a faster SCSI CD-ROM drive and plugging it in.

## Mini Tower Mania

I want to upgrade my A1200 but have a low budget (£250). I have decided to buy a hard drive and CD ROM drive and shove them into a minitower but I have some questions I'd like answered. What size hard drive should I buy? I generally only use my Amiga for playing games. I have around 50 hard drive installable games and all

- of your CDs from 9 onwards
- What speed CD-ROM drive do I need? Would a 4 or 8 be sufficient or will I need faster? Gastina's advertises a 100 speed CD-ROM drive for £100. Is this a misprint?
- I need a minitower but I'm not sure I want to risk doing your DIY project. Do you know where I can get a minitower with all the cables etc. and with all the hard work already done?
- Will I need some extra RAM? I've currently only got 2MB and I'm not sure if that is enough for playing many of the new games coming out.
- Will I need a buffered interface splitter such as the alfafuoro or the one from Eyetech?
- Should I get IDE or SCSI? What's the difference? Thanks for answering my questions. No yours if you haven't bothered to print this.

Kevin Cunningham, Belfast.

- It's difficult to answer, as the extra space keeps on getting cheaper. In theory a 1GB HD should be ok, but then if it's only a tanner more for 1.3MB it's silly not to get that. Except that it's only another tanner for 1.7MB... etc. etc.
- 4x will do for most purposes, but at least one game we know of (Golem, from Underground Software in Italy) really needs an 8 speed CD-ROM drive. Faster is a luxury. The 100 speed drive in Gastina's ad is not a misprint, but should not be taken at face value. For some bizarre reason the PC market has developed a 'my CD-ROM drive is faster than yours' obsession, which has led to some manufacturers using the hard drive as a buffer for greater speed. The Gastina device is actually a 24 speed mechanism, the Amiga buffering software should be ready by the time you read this. We'll tell you how it performs when we get one in for review.
- Ring up Eyetech on 01642 712185 or ICS on 01474 335294. They'll offer alternatives on which way to go, so listen to them and choose whatever suits you best.
- Yes, most new games require 4MB of RAM. Seriously consider a cheap accelerator, the best upcoming games want one of those.
- Only if you intend on having a 'sidecar' style mini-tower mounted on long cables. For shorter lengths, buffering has shown to be unnecessary. If you ever want to attach more than 2 devices then a buffered splitter is ideal. Despite warnings you may have heard to



the contrary, thousands of Amiga users use 2 devices connected direct and we've not heard of this demaging a computer yet. 6. IDE is a cheap but useable option. SCSI involves buying a separate SCSI adapter, and SCSI devices are more expensive. The good thing about SCSI is that you can connect 7 devices to a SCSI interface quite comfortably, while IDE is pushed at 4. Also SCSI is faster - useful when doing something with a lot of data throughput like writing to CD-Rs. In your case I imagine IDE would be better. Oh by the way, up yours too!

## Shrinking HD

After some difficulty installing Theme Park AGA to my 1200 MB hard drive I found that I was getting a 'Volume Work not validated' message on booting up. I backed everything up and prepared to reformat it, but I never got that far. Next time I switched my Amiga on, it refused to boot up at all and when I checked the device list there was no sign of DHD or DHD1.

I took my A1200 to my local repair shop and when they returned it, the hard drive had only 40MB of space on it. They said they thought I had formatted one of my partitions wrongly but this didn't match up with the size of either of my partitions. I checked inside and yes it is the same hard drive I installed.

What's happened to my hard drive, and can I get my original capacity back? Will I have to buy a new hard drive and if so is there anyone who does part exchange?

Alex Furmansk, Luton

Sounds like part of the hard drive is corrupt. Try scanning it with **Quartermaster** tools then reformatting to see if it frees up that space, but remember not to do a 'low level format' as it will only make matters worse. Our guess is that as the game was installed the hard drive suffered a kind of glitch or power outage or physical shock which damaged the hard disk.

The repair house would've fixed it by marking the bad blocks on the disk as out of service, which means lowering the capacity of the drive. In this case the only option is to buy a new one. As for part exchange, 40MB is so little nowadays it's barely worth anything. A look at prices here shows you up though, they have dropped a lot recently.

## A to Z



**Good grief, ara wa up to letter C already! Time sure does fly when you're havin' fun and John Kennedy is the man who's giving it to you.**

### C is for,

**C** A programming language which strikes a good balance between speed and human readability. Very suitable for programming applications on the Amiga.

### C++

Originally called 'C with classes' C++ builds on C adding extra features of most appeal to Object Oriented programmers. C++ compiles can also deal with C source programs.

### CACHE

An area of memory designed to speed up access to something slow. A disk cache stores information in memory which is quicker than reading it from disk. Even the CPU at the heart of the Amiga has internal caches for storing data and addresses.

### cd

AmigaDOS command for changing the current directory, for example, 'cd ram:' makes the ram disk the current directory. All subsequent AmigaDOS commands will act on the current directory unless specifically told to use a different path.

### chengetaskpri

An AmigaDOS command to alter the priority of a currently running program. Remember that the Amiga is multitasking, and so dozens of programs can be running at once. To give one an advantage over another use this command. You will need to know the process number if you want to alter the priority of a particular task, use **slut** to find it. Then use 'chengetaskpri process'.

### Chip memory

The Amiga has two kinds of memory. Chip and Fast. Chip memory is shared between the processor and custom chips and is used to store graphics sounds etc. Due to the sharing, if an Amiga only has Chip memory (referred to as 'graphics memory' on the Workbench title bar) it runs more slowly than if it also has some Fast memory. Chip memory is standard in Amigas.

### CLI

The Command Line Interface, where you type AmigaDOS commands. The CLI grew into the Shell, which added some extra editing functions.

### clicktofront

A Workbench commodity program. With clicktofront running any partly obscured window is brought to the front as soon as the mouse point is clicked on it.

### clock

A 'Real Time Clock', remembers the time when the computer is switched off. RTCs are standard on Big Box Amigas, but need to be installed on A1200s. Most are built into accelerator cards.

### cmd

A bizarre AmigaDOS command, which captures output meant for the printer or serial port and saves it to a file.

### Colours

The Amiga has lots of colours. Old fashioned HAM mode had 4096 and AGA Amiga's can pick from palettes of over 16 million colours. The number of colours on-screen at once depends on the screen mode up to 256 in normal Workbench friendly modes, and many thousand in HAM mode. With a graphics card, more colours can be displayed more quickly.

### Commodities

The Amiga Workbench tried to create a standard for all the little hack programs and utilities, so gave them a lency name and a standard way of using them. The Commodity Exchange program on the Workbench disk allows individual utilities to be examined. A great idea, missing on other platforms.

### Compiler

A program which takes source code (the almost-English entered at the keyboard by programmers) and converts it into something which the Amiga can run. Along the way it may convert it to Assembly Language, and some systems require linking as well. Compilers

for C, C++ Pascal and Basic are available for the Amiga.

### Copper

A unique part of Amiga hardware. The Copper is the coprocessor which spends its time looking after the screen display. The Copper has its own program, called a copper list, which is executed every time the screen needs to be refreshed and which contains mode and colour information, amongst other things. By altering the copper list from another program it's possible to achieve special effects, such as 'plasma'.

### copy

An AmigaDOS command used to duplicate a file or directory. There's a lot more to it than you might think, but 'copy name device' is the more basic usage, and it copies the file called 'name' to the new location.

### CPU

At the heart of the Amiga is the CPU, the Central Processing Unit. This is the chip which runs the operating system and any applications, and keeps the rest of the computer going. The faster the CPU, the faster the computer overall. Amigas use Motorola 68000, 68020, 68030, 68040 and 68060 processors at various speeds. Accelerator cards featuring Motorola's follow up to the 68040 chips, a processor called the PowerPC, are now becoming available. These are between 3 and 15 times as fast as any earlier accelerators. CPU is also an AmigaDOS command, used to control various aspects of the Amiga's processor, such as switch caches on and off.

### Custom chipset

As well as the CPU, the Amiga has custom chips designed specifically for the Amiga which look after graphics and sound. Although when the Amiga was launched these chips gave it a huge advantage in its capabilities, perversely they are now out of date and hence holding back the Amiga in several areas, notably fast graphics, fast comms and 16 bit sound.



## Letter of the month

### German TFX

Hello CU TEAM  
First of all: THANK you for  
bringing us TFX. I am a  
reader enjoying CU and  
this issue was the best news  
is just amazing!

Many Amiga Users  
want to play it, but they  
copy of CU. I'm a lucky  
got one but what about  
is there a chance to order  
you sell (thousand) in  
Cologne? Is there any  
get them?

Please, answer me  
because after we have  
Amiga Internet for  
playing TFX many  
sent me E Mails and a

to get an issue - I can't answer  
My second problem is with TFX. I  
have no idea of using it to ground  
missiles. I know how to choose  
them but how can I lock them to  
the destination and fire it?

Gunnar Gartzten, Hannover.

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If you have any problems getting  
a copy, contact them. The easiest  
thing is, as always, to subscribe  
As for the Cologne show, we'll  
see what we can do.

### Did I miss something?

I have a question: where have all the  
software advertisements gone from  
your mag? These used to be loads  
but now there are only shareware  
and hardware ads. I only ask  
because I would like to get  
Wordworth or Final Writer. I can't  
because no one is selling them.

On another subject: am I going to  
be upgrading my Amiga after  
three years on the PC. Yes, I know  
and was wondering if you could do  
a review on all the accelerators  
out there. Or just reprint the reviews  
that you have done over the years.  
Thanks

K. Shirley, via E-mail

Sure! Tell you what, if anyone has  
missed out any other issues (or  
'not bought them' as it's otherwise  
known) why not write to us and  
we'll re-print all them in their  
entirety just for you. Yeah, right?  
That's a joke by the way. You can  
order back issues of course, from  
our back issues department. See the  
advertisements somewhere around  
this back page for details.

### TFX Configuration

I'm glad TFX finally managed to see  
the light of day. I must thank you for  
your efforts on this project.

I have been experimenting with  
the TFX CD distribution to find the  
best possible configuration for the  
game. As you probably know, I  
TFX\_040 version is patched by some-  
one it won't run on an 060 processor.

I have therefore come up with this  
configuration to get the most out of  
TFX on a Blizzard 1260 Accelerator

- 1 Boot with no startup-sequence in  
NTSC mode if possible
- 2 Have your ROM mapped into las  
ram (the game appears smoother  
with ROM 3.17 don't ask me why  
though)
- 3 Run Setpatch (version 43.8) avail-  
able from ftp.amiga.de
- 4 Run Cybepatch (Phase 6's  
6888x emulation program)
- 5 Use this configuration in the con-  
fig.prg

**Detail:** High (Medium if it is still too  
jerky with Visibility between 4 and 7)  
**Fight Model:** Arcade (Simply appears  
to have way too many bugs)

**SFX:** Up to user

**Music:** Up to user

**Horizon:** 32

**Visibility:** Between 4 and 7 (Any  
more than 7 and the frame rate  
drops) u (This option is critical to  
TFX: a speed the higher you take this  
option the slower the game will run)

**Texture:** Enabled

**Graphics:** Enabled

**Show Switch:** Zoom

**View Weapons:** Yes

u

6 Execute the TFX\_FPU script in  
your TFX directory.

7 Have Fun!!!

This configuration was setup on a  
Micronix Infinity 1400T Zorro II  
CyberVision 64/3D u

Amiga OS 3.1

Blizzard 1260 66MHz (Clocks in  
Cooled)

Atapi X4 CD ROM

34 Meg Ram

1.76 Mb Floppy

1.2 GIG HD

My computer is Powered by Amiga

### Lat's ell meet up...

Much confusion has arisen, as you  
undoubtedly are aware, regarding  
the effect on computers of the transi-  
tion to the 21st century. It would  
interest me, and likely many others,  
if you could give a comparison of the  
impact of year 2000 on the operation  
of the Amiga PC and Mac. I have  
seen little on this subject in CU  
Amiga. If it is a non-issue, let us  
know that too, but all the news else-  
where indicates otherwise.  
Thankyou

Mark Dekaysai, Canada

We might just do that you know.

### Gataway plans

It might interest you to know that ZD  
Network News recently featured a  
story about Gataway 2000's plans for  
the future of the Amiga platform.

It mostly includes similar news to  
the interview with Derrick Lisle by  
the Amiga Users of the Heartland on  
September 18th (check out  
<http://www.cucug.org/amnew.html>  
for a complete text of that one; but  
also includes a few other pieces of  
information.

Like the fact they have over 400  
companies seeking Amiga licenses  
on the fact that they plan to make a  
desktop Amiga that uses standard  
video cards, and is priced to compe-  
tite with Wintel boxes.

Name not supplied.

### Sprechen sie jergon?

Regarding your monthly magazine,  
but only one real complaint.

It's ok to explore the features of  
Lightwave and Imagine 4.0 with  
hints, but if you don't have a bloody  
clue what they are you're into for the  
"Never seen the mag/Amiga before  
quote and perhaps a Novices page  
for people like me who have only  
owned an Amiga for five minutes.  
Also, I have read that the Apollo  
accelerator is fantastic and a steal at  
only £300, but what the hell is it and  
why do I need one?

Why when I loaded my free disk  
last month did it not appear on the  
screen? Apparently because I don't  
have a hard drive. Why can't you tell  
me that, and why the heck should I  
need one?

I think you get the gist of what  
I'm trying to say here, but anyway  
keep up the dedication and quality  
above all else but please give some  
consideration to us newcomers.  
Thanks

Stewart Faux, via E-mail

Deciding on the level at which to  
pitch the tone of the magazine is  
tricky and under constant review.

We are under the impression  
that there aren't many total new-  
comers in the Amiga scene right  
now, hence the more advanced  
slant on most aspects of the mag.  
However, we take your point. We  
do state the system requirements  
of our cover disks, so take care to  
read them and make sure you've  
got sufficient hardware.

Why do you need a hard drive?  
Well if you don't mind swapping  
disks until your wrist locks up then  
stay as you are. For the record, an  
accelerator makes your software  
run faster.

### Mines floppie

I own an A600 without a CD-ROM  
drive and am becoming annoyed  
about the attitude of those Amiga  
owners who are fortunate enough to  
own a CD-ROM drive. For example  
Christopher Aymer (Oct '97 issue)  
who asked you to 'get rid of the flop-  
pie disk version'. Please do not! CD-  
ROM drives are expensive and as far  
as I know, your CD coverdisk is not  
compatible with Amiga 600s using  
CD-ROM drives.

Though there's a lot more infor-  
mation on CDs I know a lot of peo-  
ple who would not be able to buy  
CU Amiga if you stopped producing  
the floppy version simply because  
they don't have a CD-ROM. Please  
keep the floppy version alive and  
keep up the great work!

Rosa Whitford, via E-mail

Our CDs will work with your A600.  
All you need is a CD-ROM drive.  
We suggest a SCSI kit with a  
Squirrel interface as the easiest  
solution. Alternatively, and more to  
the point, buy a cheaply connect an  
IDE CD-ROM drive to your A600's  
internal IDE connector.

### Rock end roll!

So much talk about PC versus Amiga  
all the time. Yes, I do it too, with my  
friends who all have PCs of course.  
One thing I have asked them about  
is, can you or have you ever edited a  
startup-script on a PC?

Can you or have you ever edited  
a script that's like an AmigaGuide on  
a PC? No - they don't even know  
what I'm talking about.

So please tell me if it's possible  
to write such a script on a PC which  
is similar to an AmigaGuide.  
AmigaGuide appears to be unique

and I like it very much. Some time ago now I wrote Norwegian post-codes in an AmigaGuide - over 7000 lines. Phew! But I would certainly like an upgrade of the AmigaGuide itself now. And I've seen some too, but they are all too over-exposed. Just let it be simple as it is now. Maybe a little more for example colours or possibly to show a picture with nodes inside the picture.

Then you could make something look like a real program. There is already some programs doing that but they're too complicated.

Carl E. Bosan, Norway

You're right, there is already something like an advanced version of AmigaGuide, with support for pictures and animations too. It's called HTML. Medien PCs use this as their standard hypertext system and there's no reason why you couldn't switch to it as well.

So, 7000 lines of Norwegian post codes eh? Shame you didn't invite us to the party - sounds like a right old knees up!

## Paging Justin Tuiji

On Page 97 of the October issue a letter was printed from a Mr Justin Tuiji who lives in Norfolk. A small part of which mentions an apparent offensive letter sent by RBF Software.

As we do not have a record of this reader's name or address on our database, we would in fairness to us and CU Amiga ask Mr Tuiji to send us a copy of the offensive letter he mentions (you obviously have our address), to enable me to investigate this matter as I in turn find this public declaration/accusation of being offensive very unfair and would, if possible, like to get this amicably sorted to both parties satisfaction.

Ray Burt-Frost, RBF Software

## I have a cunning plan

I've just heard some news about Microsoft, which has left me shocked! While flicking through a school copy of 'New Scientist', I came across a short article about the new Windows '98 package which had some of the system requirements for this new 'wonderful' operating system.

According to the NS, W98 will require at least 120Mb of free hard disk space which doesn't seem unreasonable for a disk-based OS, but what really shocked me is that

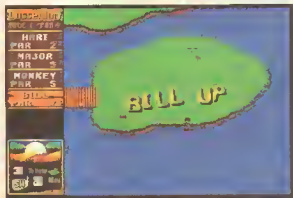
the new Windows will need at least 48Mb of free RAM! I just don't see why people can tell for this evary time Bill Gates decides he wants more cash, when the Amiga is an extremely cheap and powerful alternative.

OK, admittedly recent years has seen little advertising for the Amiga, but a machine as brilliant as this shouldn't need advertising, as in the old days the Amiga sold simply by word of mouth. On the other hand, Win98 may just be one step too far for the Microsoft boys, as PC users won't be as happy to upgrade their high spec machines to these mammoth levels.

This means they'll be looking for a cheap alternative, which is where our chums at Gateway/AI come in, if Gateway produce a new Amiga with new Workbench (not a 3x upgrade) but a new version 41, better graphics and sound, all the extras people have come to expect - all this for a reasonable price, they can attempt to release it at the same time as Win98.

The perfect ad campaign would be for the ads to go out the same time as Win98's, showing the new Amiga's capabilities next to that of the new Windows. Strange? No, because at the end of the advert it could be shown that the Amiga is a cheap alternative that doesn't need upgrading every time Microsoft has spent some money, and that it also has an already huge user base. All I can say is good luck to Petro Tyschtschenko and Jeff Schindler's teams. They'll need it! Finally, when I spell checked this file the spell checker insisted that 'Microsoft' should be spelt 'Microcyst'. And they say computers can't think!

Daniel Thornton, via E-mail



▲ Sensible GOLF, no, it's not hard drive installable. Not so standard anyway.

Not a bad plan, that. The trouble is people will buy what they are told to buy, hence your clever marketing strategy to tell people to buy Amigas over PCs. People have been bludgeoned into the notion that you need a PC running a Microsoft OS in order to do anything useful. The world has been educated to a mind set, and changing that is going to be an even tougher job than setting it was in the first place. Indeed, good luck to Petro and co.

## Shocking 'mistake'

I'm a regular subscriber to CU Amiga and I'm shocked quite frankly. Review Sens: Golf Correction: 'Hard Drive installable? No' WRONG! The game is hard drive installable thanks to work by myself and a Mr Jean-Francois Fable who has written loads of patches for Amiga games. Visit <http://www.ensica.fr/patches.html>.

I think that as an apology for this mistake you should put all his patches on a cover CD so those without Internet connection can benefit from too. Please.

Another thing. Review, Sens Soccer 1996/97, same mistake but thanks to me and Piotr Bielik Silek his patch (on the Amiga) on the CD too. Let's not see it happen again. Keep up the great mag.

Dominic Casswell, via E-mail

We review games based on how they perform on their own. If someone has the sense to make a patch, then fine, but it still stands that out of the box, neither of these games will install onto hard drive. Your comments were told to the CD editor by the way, so look out for a patch bonanza soon.

# To the Point...

## Here's a nice quickie

Can you tell me how to run PC programs on my Amiga?

Louis Shanahan, County Offaly.

Use PC Task to get your Amiga to emulate a PC compatible and run herid PC software.

## Give us a card

Please, please anyone - give us A1200 owners something we all desperately want: a compatible affordable graphics card - you'll make a killing.

Steve Poponski, Melbourne, Oz

It looks like phase 5 have answered your prayers Steve! Their new line of PowerUp cards for the A1200 have an expansion slot designed to accept a graphics card called the BVisiion64.

## Internet Please

How about having some space dedicated to the Internet? Perhaps tutorials on how to set up net software, new updates for browsers using the software etc.

David Andersen, via E-mail

You do read the magazine don't you? What about Net God, Wired World, Surf of the Month, all the coverage of camera hardware and software, the special Internet features and so on?

## After TFX

Hello there! First of all let me say that I was as happy as a man who lives down wind of a prozac factory to see TFX cover mounted on your fine mag. I hope that this could become a regular venture rather than a one off. I'm sure there are a number of Amiga games that were finished but never released, Pizza Tycoon and Putty Squad are good examples, that you could also cover mount. So, how about it?

Paul Palmer, via E-mail

TFX was a special case. It was a game people wanted very much and we were able to get. It's not our business to publish games, but if something comes along and the circumstances are just right...



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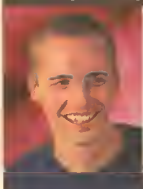
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# Points of View

CU Amiga's regular soap-box corner never ceases to spark off a multitude of responses from you readers. Let's see what happens with this month's bunch of rants...



## PowerUp to the people



It's crunch time for the Amiga. Sure, it's had quite a few crunches already, but it's now at a point where it really is or die. The 'do' option comes in the form of phase 5's PowerUp cards (see the front end of this magazine for a look at the first model to appear). An A1200 version will arrive very

soon, offering a short cut to state of the art computing that would bring the Amiga up to scratch with the very best and latest PCs. The 'die' option is as simple as it is obvious and will be inevitable if this magnificent opportunity is passed up.

However, for once this isn't leading to a direct call for all existing Amiga owners to buy PowerUp cards. That in itself won't save the scene or bring in any new users, although it will help encourage programmers to develop Amiga PowerPC software. If the full potential of PowerUp is to be realised what we need is PowerUp! Amigas on sale in the high street and retail outlets throughout the world. I still firmly believe the world does want an alternative to PC compatibles, and in many cases this is simply a matter of price.

People want a more affordable entry point into home computing, but while a 2Mb 68020 A1200 is

**"With a few concessions to modern expandability (SIMM slots for example) a compact but powerful Amiga could once again rule the amateur roost".**

affordable, it's clearly yesterday's technology. If there's something the average electronics consumer has learned over the past decade, it's the lesson of not becoming saddled with outdated technology.

With a PowerPC processor on board, an affordable Amiga could realistically hit the high streets offering the required string of technobuzzwords to sway the discerning buyer. With a few concessions to modern expandability (SIMM slots for example) a compact but powerful Amiga could once again rule the amateur roost.

Whether Gateway wants to put energies into such a project, or instead channel their resources into the construction of a far bigger

more distant project, remains to be seen.

If indeed Gateway do decide their Amiga divisions have bigger fish to fry, there's still the matter of their open licensing policy, which opens the door to anyone with enough enterprise to make their own PowerPC Amigas.

While there have been some recent success stories with third party Amiga manufacturers, if the Amiga as a platform is to have any kind of a rebirth, it will require a far larger player in order to push it to those millions of potential customers outside of the current Amiga scene.

■ Tony Hargan is Editor of CU Amiga

## Patience is a virtue

As Amiga users we all fall in the trap at some point. We've been with it so long that we're each certain we know what is best for the Amiga. Be patient and wait for authority to tell us what's going on? Hah! Who is this Jell Schindler, anyway?

From reading CU, all you know is that he has a ball, right? Why hasn't he given us his engineering plan for the Amiga if he's this great former engineer? Why have we waited so many months since Gateway bought the Amiga to hear these things? It's hard to be patient through situations like these. But consider the alternative. A lot of people have pushed for Amiga, Inc. to commit to PowerPC and CHRP architecture (Common Hardware Reference

Platform, a sort of generic set of standards for creating PowerPC machines). They'd have preferred that Gateway commit to this yesterday — more like a month or two after buying the Amiga. But what would that have meant for us?

First of all, it would have meant that management was making an engineering decision. There were no engineers working for Amiga, Inc. at the time. Keep in mind that the American Amiga engineering talent from Commodore has all moved on.

Many have good jobs at their own companies and aren't going to jump on board the first time someone calls them saying they own the Amiga. And we all remember what happens when management makes engineering decisions: inferior products result. Not to mention the

**"Now that Apple has cancelled cloning and purchased their nearest rival, CHRP is in a comatose state".**

spanner Apple threw into CHRP development a few months ago when they all but cancelled their cloning licenses.

The market momentum for CHRP was based around the presumption that at least in the short run, the majority of CHRP machines would run the MacOS, until other operating systems caught on with the new hardware. Now Apple has cancelled cloning and purchased their nearest rival, CHRP is in a comatose state.

Imagine the damage control Amiga Inc. would be going through now if they'd made such an arbitrary

decision without letting qualified people look at the situation first!

The Amiga's something special, if it wasn't we wouldn't all still be here. If it is to be taken to the next level of success, it's going to need level heads and coordinated decisions behind it.

These things take time, so for now, we all need to be patient and let Schindler get his house in order. (You thought I was going to say 'I just didn't try'?)

■ Jason Compton is US Correspondent for CU Amiga.



## Amiga - the new Apple?



Apple, who have seen a drastic cut in their market share over recent years, recently saw the departure of Gil Amelio, a business man not a visionary.

He was replaced by Steve Jobs, considered more of a visionary than a business man. This would have been a bit like Jay Miner taking over from Mahdi Ali just before Commodore went so spectacularly down the tubes. The Apple advocates are all in heaven at the concept that Steve Jobs, the original Mr Macintosh, will be back behind the helm.

slewing Apple back from the brink that the evil Mr Amelio was leading it toward.

This more practically minded old there have been raising a few eyebrows at Jobs' activities since taking over the reins, albeit temporarily. So far he has signed a deal with Bill Gates, a figure of hate for Apple users, even more now for Amiga users, and secondly he has told all the Mac clone manufacturers that the game is over and that they will have to shut up shop.

Motorola, who were producing Mac clones, are not happy campers and may be less willing to help Apple in future developments of the PPC chip. This has been jumped upon by the pro DEC Alpha camp who say that now the Amiga must go Alpha rather than PPC, but the news that Intel are buying out the Alpha while Motorola will continue with the PPC has put a crimp in that theory.

Apple's claim is that they were losing an enormous amount of money due to the clone manufacturers, and that developing the hardware and software was not sufficient enough, and they had to

**"Motorola, who were producing Mac clones, are not happy campers and may be less willing to help Apple in future developments of the PPC chip."**

be selling the hardware too. They say that they were subsidising every clone sold to the tune of \$200.

It seems to me that Apple have made a rather large error. I can't believe that this \$200 subsidy is anything other than a result of the way that Apple refuse to use anything they haven't developed themselves. Gateway on the other hand have large resources tied in with their PC developments.

By using a healthy mixture of off the shelf components and Amiga specific developments, they can specify a hardware platform which requires a lot less system specific development. What's more, if they are really sharp, they can make the clone market work for them.

With companies like Intel and Micronix working on very interesting developments of their own, licensing could easily become a 2 way process. The fallout from the Apple business is that CHRP is no longer a

viable alternative for a future Amiga.

The Common Hardware Reference Platform is no longer going to be available to third party developers, another thing Motorola are not happy about.

The basic hardware is very straightforward though. Motorola have a lot of expertise in the construction of PPC hardware, they have PPC to PCI bridge chips, and they have solid I/O implementations.

If Gateway/Amiga Inc. were to jump in with the right offer, Motorola could be encouraged to think that there are serious alternatives to the Macintosh when it comes to use of PPC chips in desktop computers. Who knows, Motorola might not have to close down its clone computer making business after all.

■ Andrew Kerr is Staff Writer for CU Amiga.

## Console yourselves?

Why would anyone want to buy a new Amiga? It's possible the end of the console boom is right, it could be the last Christmas for the little grey and black boxes ending under the TV, and next year they could be in the cupboard with the Atari VCS, waiting for car boot sales.

Remember these things go in cycles, and after shelling out for Playstation and a Nintendo64 a lot of people won't want any new hardware for a long, long time. It would help if manufacturers would make their hardware systems compatible with the latest generation games, but they don't.

Although a Nintendo64 could run SuperNES games if it wanted to, it won't. You have you buy all the games again - because at fifty to seventy quid a throw that's where the profit is. The current state of the PC doesn't help consoles either - with 3D graphics cards starting to make these presence felt, there's a real chance the PC will become the

definitive gaming console. PCs are actually getting easier to use, and with the incredible power of a Pentium, there are few games which would be impossible to port given enough time and money.

There's a chance that Windows will grow so big and clever that it will trip over itself, but in general Windows98 will be easier to use and powerful enough to convert almost all Workbench fanatics. At the very least, the excellent development tools should lure away the programmers. So where does this leave the Amiga? Give me thirty seconds and I'll tell you. The only possible future of the Amiga is (drum roll as he opens golden envelope) as a dedicated Internet terminal. Think about this for a while, and then tell me (that you wouldn't be interested in buying one. And don't think you have heard it before, you haven't - this is new).

The new Amiga hardware is a small box, connected to the family TV or a dedicated monitor. The keyboard is infrared. In fact, up to the

**"This could be the last Christmas for the little grey and black boxes sitting under the TV, and next year they could be in the cupboard with the Atari VCS"**

CDTV e bit, and that's all that needs doing to the cosmetics. There are some big differences inside the case though. Give it a fast processor, chunky graphics, built in hard ware for capturing, compressing and playing video and make it a dedicated Internet-friendly box with robust (read invisible to most users) TCP/IP and Web Mail applications. Here's a hard bit, but it has to be done because we need Internet Explorer or Netscape. Forget AmigaDOS and the Workbench (sniff) and make it run WindowsCE, the new compact operating system from Microsoft.

WindowsCE is quick, 32 bit, fully multitasking and can turn on and off instantly. It also speaks fluent Internet, is available for a range of processors and comes with a stan-

dard Web browser.

Now, and here's the clever part, build in one of those new format modems which the power generating companies are promising will give us 30 times the speed of our existing modems next year. The result is a fast, easy to use video phone and Internet terminal which would make UK the most technologically advanced country in the world.

Merf shopping, dial up porn (most important to launch any new media) software, games, DVD CD-ROM. It's a dream come true for home computer users. And that's my recipe for the future of the Amiga.

■ John Kennedy is a Technical Consultant for CU Amiga.



## Squirrel CDR

Make my own CDs? No, too expensive. Well, not any more with the brand-new SquirrelCDR system. Combining a brilliant, 2-speed write, 6-speed read CDR drive with the excellent commercial version of MakeCD, the SquirrelCDR system is unbeatable—just look at what you can do:

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Ideally suited for the Squirrel SCSI interfaces on the A1200, the SquirrelCDR will also work on most SCSI aware Amigas.

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